



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

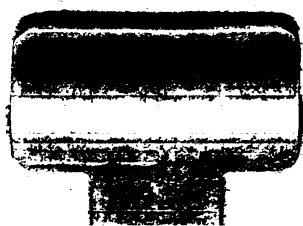
LD
7552
B 473837 H

STORAGE

U112

ANNUAL REPORT
OF
THE PRESIDENT
OF
For
BRYN MAWR COLLEGE,

1894-95.



ANNUAL REPORT
OF
THE PRESIDENT
OF
BRYN MAWR COLLEGE,
1894-95.

PHILADELPHIA :
ALFRED J. FERRIS, PRINTER, 29 NORTH SEVENTH STREET,
1896.

BOARD OF TRUSTEES.

PHILIP C. GARRETT,
President.

HENRY TATNALL,
Treasurer.

EDWARD BETTLE, JR.,
Secretary.

JAMES CAREY THOMAS, Baltimore.	ALBERT K. SMILEY, Lake Mohonk, N. Y.
JAMES WHITALL, Philadelphia.	PHILIP C. GARRETT, Philadelphia.
JOHN B. GARRETT, Rosemont.	EDWARD BETTLE, JR., Philadelphia.
DAVID SCULL, Philadelphia.	HOWARD COMFORT, Philadelphia.
CHARLES HARTSHORNE, Philadelphia.	JUSTUS C. STRAWBRIDGE, Philadelphia.
WILLIAM R. THURSTON, New York.	THOMAS SCATTERGOOD, Philadelphia.
HENRY TATNALL, Philadelphia.	

EXECUTIVE COMMITTEE.

HOWARD COMFORT,	CHARLES HARTSHORNE,
JAMES WHITALL,	JAMES CAREY THOMAS,
EDWARD BETTLE, JR.	

COMMITTEE ON BUILDINGS AND GROUNDS.

DAVID SCULL,	JAMES WHITALL,
JUSTUS C. STRAWBRIDGE,	THOMAS SCATTERGOOD.

FINANCE COMMITTEE.

JOHN B. GARRETT,	THOMAS SCATTERGOOD,
JUSTUS C. STRAWBRIDGE.	

LIBRARY COMMITTEE.

EDWARD BETTLE, JR.,	HOWARD COMFORT,
DAVID SCULL.	

ACADEMIC APPOINTMENTS.

- M. CAREY THOMAS, PH.D.,** *President of the College and Professor of English.*
A.B., Cornell University, 1877; studied at the Johns Hopkins University, 1877-78; University of Leipsic, 1879-82; Ph.D., University of Zürich, 1882; Sorbonne and the Collège de France, 1883; Dean of the Faculty of Bryn Mawr College and Professor of English, 1885-94.
- CHARLOTTE ANGAS SCOTT, D.Sc.,** *Professor of Mathematics.*
Lincoln, England. Graduate in Honors, Girton College, University of Cambridge, England, 1880; B.Sc., University of London, 1882; Lecturer on Mathematics in Girton College, 1880-84; lectured in connection with Newnham College, University of Cambridge, England, 1880-83; D.Sc., University of London, 1885.
- EDWARD H. KEISER, PH.D.,** *Professor of Chemistry.*
S.B., Swarthmore College, 1880; Assistant in Chemistry, Swarthmore College, 1880-81; S.M., Swarthmore College, 1881; Fellow in Chemistry, Johns Hopkins University, 1882-84; Ph.D., Johns Hopkins University, 1884; Student at the Royal School of Mines, Freiberg, Saxony, 1884; Assistant in Chemistry, Johns Hopkins University, 1884-85.
- HERMANN COLLITZ, PH.D.,** *Associate Professor of Comparative Philology and German.*
Bleekede, Hanover, Germany. University of Göttingen, 1875-78; University of Berlin, 1878-81; Ph.D., University of Göttingen, 1878; Privatdozent in the University of Halle, 1885-86.
- JAMES HARKNESS, A.M. (Cambridge and London),** *Associate Professor of Mathematics.*
Derby, England. Major Scholar, Trinity College, University of Cambridge, England, 1882; Graduate in Honors (8th Wrangler) in the Cambridge Mathematical Tripos, 1885; Mathematical Exhibitioner, London University Intermediate Arts Examination, 1885; Mathematical Scholar, London University B.A. Examination, 1887.
- HERBERT WEIR SMYTH, PH.D.,** *Professor of Greek.*
A.B., Swarthmore College, 1876, and Harvard University, 1878; University of Leipsic, 1879-81; University of Göttingen, 1881-83; Instructor in Classics and Sanskrit, Williams College, 1883-85; Ph.D., University of Göttingen, 1884; Fellow by Courtesy and Lecturer on Greek, Johns Hopkins University, 1885-87; Reader in Greek Literature, Johns Hopkins University, 1887-88.
- MARY GWINN, PH.D.,** *Associate Professor of English.*
Studied at the University of Leipsic, 1879-82; University of Zürich, 1882; Sorbonne and the Collège de France, 1883; Fellow in English, Bryn Mawr College, 1885-87, and graduate student, 1887-88; Ph.D., Bryn Mawr College, 1888.
- CHARLES MCLEAN ANDREWS, PH.D.,** *Associate Professor of History.*
A.B., Trinity College, 1884; Fellow in Johns Hopkins University, 1888-89; Ph.D., Johns Hopkins University, 1889.
- GONZALEZ LODGE, PH.D.,** *Professor of Latin.*
A.B., Johns Hopkins University, 1883; Graduate Scholar and Fellow, Johns Hopkins University, 1883-86; Ph.D., Johns Hopkins University, 1886; Professor of Greek, Davidson College, 1886-88; American School of Classical Studies, Athens, 1888-89; University of Bonn, 1889.
- GEORGE A. BARTON, PH.D.,** *Associate in Biblical Literature and Semitic Languages.*
A.B., Haverford College, 1882, and A.M., 1885; A.M., Harvard University, 1890; Ph.D., Harvard University, 1891.
- JOSEPH AUGUSTE FONTAINE, PH.D.,** *Professor of Romance Languages.*
College of Sion, Nancy, France, 1879; Paris, 1880-81; Johns Hopkins University, 1882-86; Ph.D., Johns Hopkins University, 1886; Collège de France, Sorbonne, Ecole des Hautes Etudes, Ecole des Chartes, University of Bonn, 1886-87; Instructor, University of Nebraska, 1887-89; Professor of Modern Languages, University of Mississippi, 1889-91.
- ARTHUR STANLEY MACKENZIE, PH.D.,** *Associate Professor of Physics.*
A.B., Dalhousie University, 1885; Tutor in Mathematics, Dalhousie University, 1887-89; Fellow, Johns Hopkins University, 1890-91; Ph.D., Johns Hopkins University, 1894.

JAMES DOUGLAS BRUCE, PH.D., *Associate in English Philology.*

A.M., University of Virginia, 1883; University of Berlin, 1886-88; University of Strasburg, 1888; Johns Hopkins University, 1889-90; Professor of Modern Languages, Centre College, 1890-91; Ph.D., Johns Hopkins University, 1894.

THOMAS HUNT MORGAN, PH.D., *Professor of Biology.*

B.S., State College, Kentucky, 1886, and M.S., 1888; Graduate Scholar, Johns Hopkins University, 1888-89; Fellow in Biology, Johns Hopkins University, 1889-90; Ph.D., Johns Hopkins University, 1890; Adam T. Bruce Fellow, Johns Hopkins University, 1890-91.

JOSEPH W. WARREN, M.D., *Associate Professor of Physiology.*

A.B., Harvard College, 1871; University of Berlin, 1871-72; University of Leipsic, 1872-73; University of Bonn, 1873-79; M.D., University of Bonn, 1880; Assistant and Instructor in Physiology, Harvard Medical School, 1881-91; Lecturer in Medical Department of the University of the City of New York, 1885-86; Lecturer in Physiology, University of Michigan, 1889.

DICKINSON SERGEANT MILLER, PH.D., *Associate in Philosophy.*

University of Pennsylvania, 1885-88; Fellow in Philosophy, Clark University, 1889-90; Morgan Fellow, Harvard University, 1890-91; Walker Fellow, Harvard University, 1891-92; A.B. and A.M., Harvard University, 1892; University of Berlin, 1892-93; Ph.D., University of Halle, 1893.

ELMER P. KOHLER, PH.D., *Associate in Chemistry.*

A.B., Muhlenberg College, 1886, and A.M., 1889; Johns Hopkins University, 1889-91; Fellow in Chemistry, Johns Hopkins University, 1891-92; Ph.D., Johns Hopkins University, 1892.

EDGAR BUCKINGHAM, PH.D., *Associate in Physics.*

A.B., Harvard University, 1887; Assistant in Physics, Harvard University, 1888-89; Assistant in Physics, University of Strasburg, 1889-90; University of Leipsic, 1890-91; Assistant in Physics, Harvard University, 1891-92; Tyndall Scholar of Harvard University, University of Leipsic, 1892-93; Ph.D., University of Leipsic, 1893.

LINDLEY MILLER KEASBEY, PH.D., R.P.D., *Associate Professor of Political Science.*

A.B., Harvard University, 1888; A.M., Columbia College, 1889; Ph.D., Columbia College, 1890; University of Berlin, 1890-91; University of Strasburg, 1891-92; *Rerum Politicarum Doctor*, University of Strasburg, 1892; Assistant in Economics, Columbia College, and Lecturer on Political Science, Barnard College, 1892; Professor of History, Economics and Political Science, State University of Colorado, 1892-94.

MORTIMER LAMSON EARLE, PH.D., *Associate Professor of Greek and Latin.*

A.B., Columbia College, 1886, A.M., 1887, and Ph.D., 1889; American School of Classical Studies, Athens, 1887-88; in charge of excavations at Sicyon, December, 1887, and July and August, 1891; studied at Bonn, 1887-88; studied at Berlin, 1889; Assistant in Greek, Columbia College, 1886-89; Acting Assistant in Latin, Columbia College, 1886-87; Instructor in Greek, Barnard College, 1889-95; Lecturer in Greek, Columbia College, 1894-95.

PAUL ELMER MORE, A.M., *Associate in Sanskrit and Classical Literature.*

A.B., Washington University, 1887, and A.M., 1891; A.M., Harvard University, 1893; Assistant in Indo-Iranian Languages, Harvard University, 1894-95.

ALFRED HODDER, *Lecturer in English.*

Graduate School, Harvard University, 1890-91; Morgan Fellow, Harvard University, 1891-92; University of Freiburg, University of Berlin, 1892-93.

RICHARD NORTON, A.B., *Lecturer in the History of Art.*

A.B., Harvard University, 1892; American School of Classical Studies, Athens, 1892-94; University of Munich, 1894-95.

ROSE CHAMBERLIN, *Reader in German.*

Great Yarmouth, England. Graduate in Honors, Newnham College, University of Cambridge, England, 1886 (Mediæval and Modern Languages Tripos, First Class).

ABBY KIRK, A.B., *Reader in English.*

A.B., Bryn Mawr College, 1892.

HARRIET RANDOLPH, Ph.D., *Demonstrator in Biology and Reader in Botany.*
A.B., Bryn Mawr College, 1889; Fellow in Biology, Bryn Mawr College, 1889-90; University of Zürich, 1890-92; Ph.D., University of Zürich, 1892.

FLORENCE V. KEYS, A.B., *Reader in English.*

A.B., University of Toronto, 1891; Fellow in Greek, Bryn Mawr College, 1891-92; Fellow in English, Bryn Mawr College, 1892-93; Examiner in English in the University of Toronto, 1894-95.

THERÈSE F. COLIN, A.M., *Reader in Romance Languages.*

Diplômée et agrégée, Collège de Neuchâtel, 1875; A.M., Leland Stanford, Jr. University, 1893; Muséum d'Histoire Naturelle, Paris, 1883-85; University of the City of New York, 1887-88; Fellow in Romance Languages, Bryn Mawr College, 1893-94; Student in Romance Philology and Literature, Sorbonne, Collège de France, Ecole des Hautes Etudes, Ecole des Chartes, 1895.

FLORENCE BASCOM, Ph.D., *Reader in Geology.*

A.B., University of Wisconsin, 1882, B.Sc., 1884, and A.M., 1887; Johns Hopkins University, 1891-93; Ph.D., Johns Hopkins University, 1893; Assistant in Geology and Instructor in Petrography, Ohio State University, 1893-95.

ALICE BERTHA FOSTER, M.D., *Director of the Gymnasium.*

Graduate of Dr. Sargent's Training School for Teachers, 1886; M.D., Medical School of University of Buffalo, 1891; Anderson Summer School, Chautauqua, 1892; Studied in Baron Posse's Normal Class in Practice, Boston, and in Harvard Summer School of Phys. Ed., 1886; Director Buffalo Sanatory Gymnasium of the Women's Educational and Industrial Union, Buffalo, 1886-92; Assistant Teacher, Harvard Summer School of Phys. Ed., 1889-90; Tutor in Phys. Culture (in charge of the Women's Work), University of Chicago, 1892-94.

ELIZABETH BATES, *Assistant in the Gymnasium.*

Graduate of Boston Normal School of Gymnastics, 1893.

MARY SHERWOOD, M.D., *Lecturer on Hygiene and Physician of the College.*

A.B., Vassar College, 1883; M.D., University of Zürich, 1890; Lecturer on Pathology at the Woman's Medical College of Philadelphia, 1891-96.

HENRIETTA R. PALMER, A.B., *Librarian.*

School of Library Economy, Columbia College, 1887-89; Acting Librarian, Bryn Mawr College, 1890-91; A.B., Bryn Mawr College, 1893; Associate Librarian, Bryn Mawr College, 1893-95.

JANE BOWNE HAINES, A.M., *Associate Librarian.*

A.B., Bryn Mawr College, 1891, and A.M., 1892; Fellow in History, Bryn Mawr College, 1892-93.

BESSIE BAKER, B.S., *Assistant Librarian.*

B.S., Purdue University, 1886; studied in the New York State Library School, 1891-92.

FREDERICKA M. KERR, *Bursar.*

MADELINE VAUGHAN ABBOTT, A.B., *Secretary.*

A.B., Bryn Mawr College, 1893; Secretary to the Dean, Bryn Mawr College, 1893-94.

ISABEL MADISON, B.Sc., *Secretary to the President.*

B.Sc., University of London, 1893; Graduate Student in Mathematics, Bryn Mawr College, 1892-93, and Fellow in Mathematics, 1893-94; Holder of the Mary E. Garrett European Fellowship and Student in Mathematics, University of Göttingen, 1894-95.

MARY HARRIS, A.B., *Recording Secretary.*

A.B., Bryn Mawr College, 1894.

ERRATUM.

Page seven, first paragraph, second line, for "eleventh" read "tenth."

to take effect at the beginning of the year covered by this report. Dr. Rhoads, however, had remained in very close relations with the College. As Professor of Christian Ethics he retained his seat in the Academic Council and in the Faculty, and as President of the Board of Trustees he filled the position he had held since the death, in 1891, of the first President of the Board, Francis T. King. There was, therefore, at the beginning of the academic year every reason to believe that the College would continue to enjoy the benefit of his presence and counsel for many years to come, and the grief caused by his unexpected death was correspondingly great.

A memorial meeting attended by the Trustees and Faculty, the whole body of undergraduate and graduate students, and a large number of the *alumnæ* and friends of the College, was held on the 7th of January in Taylor Hall, to give formal and permanent expression to this sense of loss and to the love and honor in which the memory of Dr. Rhoads was held by all connected with the College. Addresses were delivered by Philip C. Garrett, of Philadelphia, one of the original Trustees appointed by the Founder, and a member of the Executive

Committee of the Trustees ; Dr. James C. Thomas, of Baltimore, also one of the original Trustees and a member of the Executive Committee; Professor Edward Washburn Hopkins, the senior member of the Classical Faculty; Professor Edward H. Keiser, the senior member of the Scientific Faculty; Dr. Herbert Weir Smyth, Professor of Greek; Professor J. Rendel Harris, of Cambridge University, England, who held the post of Lecturer in Biblical Literature during two years of Dr. Rhoads' presidency; Miss Edith Sampson, of Philadelphia, President of the Alumnae Association of Bryn Mawr College; Miss Susan Grimes Walker, President of the Students' Association for Self-Government; and by the President of the College. These addresses were published afterwards in pamphlet form. In the appendix to this report will be found the memorial resolutions adopted by the Board of Trustees, by the Faculty, and by the Alumnae Association of Bryn Mawr College.

Professor Edward Washburn Hopkins, who had held the chair of Greek, Sanskrit and Comparative Philology since the opening of the College, as Associate Professor till the year 1891, and afterwards as full Professor, resigned his position at the close of the past year in order to accept the professorship of Sanskrit in the University of Yale left vacant by the death of the eminent Sanskrit scholar, Professor William T. Whitney. The Board passed resolutions expressing their cordial appreciation of Dr. Hopkins' ten years of faithful and efficient service and their satisfaction that in his new post he would be able to devote himself more exclusively to his chosen field of work, Sanskrit, than was possible in Bryn Mawr College, where the teaching of Greek was combined with that of Sanskrit. The resignation of Mr. Robert G. Bury, who held a one-year appointment as Lecturer in Greek and

Latin Literature, was accepted, and the subject of the future organisation of the classical department received the careful consideration of the President and the Trustees. It was decided that in the new appointments special regard should be given to the strengthening of the departments of Latin and Greek in order that the splendid facilities offered by the newly-acquired Sauppe classical library might be utilised and the growing demand of the students for more extended teaching in the classics fully met. The department of Comparative Philology was assigned to Dr. Hermann Collitz, whose investigations in Comparative Indo-European Philology have won him universal recognition ; and Dr. Collitz's title was changed from that of Associate Professor of German and Teutonic Philology to that of Associate Professor of Comparative Philology and German. Professor Herbert Weir Smyth retained his former position as head of the graduate Greek department, succeeding Dr. Hopkins as Senior Professor of the classical department and head of the undergraduate department of Greek.

After a minute survey of the whole field and after full consultation between the President and various eminent classical professors, the Trustees elected Dr. Mortimer Lamson Earle Associate Professor of Greek and Latin and Mr. Paul Elmer More Associate in Sanskrit and Classical Literature.

Dr. Earle had received in 1886 the degree of A.B., in 1887 that of A.M. and in 1889 that of Ph.D. of Columbia College, had studied between 1887 and 1889 in the University of Bonn, and the American School of Classical Studies at Athens, spending the year 1887-88 in Athens, and had been in charge of the excavations at Sicyon in December, 1887, and again in July and August, 1892.

He had held the post of Assistant in Greek in Columbia College during the time he was not abroad in the years 1886-89, and also that of Acting Assistant in Latin in Columbia College in the year 1886-87. After his return Dr. Earle had been instructor in Greek at Barnard College from 1889 to 1895, conducting during this time all the advanced Greek classes, and in 1894-95 had been Lecturer in Greek in Columbia College.

Mr. More received in 1887 the degree of A.B., and in 1891 that of A.M., of Washington University, and in 1893, after two years of graduate study, the degree of A.M. of Harvard University. During the year 1893-94 he had held the post of Assistant in Indo-Iranian Languages, and had helped Professor Lanman in conducting graduate classes in Sanskrit in Harvard University. This post he resigned to accept the offer of the Trustees. Throughout the three years of his stay at Harvard Mr. More had spent a large part of his time in graduate work in Greek, and he had already given evidence in his published writings of his power to embody Oriental philosophy in excellent literary form. It was therefore decided to put into his hands not only the work in Sanskrit, but also the courses in Homer and Horace, and the lectures on Greek and Latin literature.

In order to complete the organisation of the classical department there should be appointed in the near future another associate or associate professor in Latin. The demand for post-major courses in Latin and Greek is much greater than we can at present supply. Twenty-five hours of continuous graded work in Greek, including five hours of elementary Greek, and nineteen hours of continuous graded work in Latin, are offered weekly each year, the authors chosen for the post major and the graduate courses being in

all cases varied so that the same students may elect the work in two consecutive years and yet the courses offered are by no means sufficient. The selection of a suitable candidate whose especial line of classical work would supplement and extend rather than duplicate that of the classical scholars already included in our faculty is however a matter of some difficulty.

The classical department was much strengthened by the vote of the Trustees creating a lectureship in the history of art for the coming year, and by the announcement of an elective course in Greek and Roman art open to all students, a special course in Greek archæology open only to students of Greek and Latin, and of graduate courses in archæology. The Trustees elected to this lectureship Mr. Richard Norton, who, as the son of Professor Charles Eliot Norton, bears a name honorably associated both in this country and abroad with art and liberal culture. Mr. Norton, after receiving in 1892 the degree of A.B. of Harvard University, had spent three years in Europe, studying for two years in the American School of Classical Studies at Athens, and for one year under Professor Furtwängler in the University of Munich. There will be offered by Mr. Norton, in addition to the courses in classical art and archæology, a course either in Italian art, or in the history of painting.

The Board voted the sum of \$500 for the purchase of books and photographs for the department of art and archæology, a sum further increased by "a gift" to the President of \$1300 for the same purpose, and by the vote of the Undergraduate Association of Students of Bryn Mawr College to apply the fund raised by the Association in memory of Dr. Rhoads to the purchase of books in art selected by Mr. Norton.

A friend of the College has placed at the disposal of Mr. Norton a very large collection of Braun carbon photographs and an extensive collection of other photographs, including almost complete sets of French and English architectural monuments, and photographs of Egyptian and Japanese buildings and works of art. The new department will accordingly open with an equipment of photographs and books sufficient for its present needs; but in order to teach classical art efficiently there will be required, almost immediately, a collection of casts similar to, even if at first much smaller than, the newly-acquired collection of Cornell University or the admirable Princeton collection.

For some time past there had existed among the students of science, and more especially among the students of chemistry, now in the college, a very general desire to study geology. A readership in geology was accordingly founded by the Trustees for the year 1895-96, and three rooms on the fourth floor of Dalton Hall, a professor's room, a general laboratory and lecture room, and an advanced laboratory, were appropriated to this new department. This readership was most satisfactorily filled by the appointment of Dr. Florence Bascom, who in 1882 had received the degrees of A.B. and L.B., in 1884 that of B.Sc., and in 1887 that of A.M. of the University of Wisconsin, had held from 1889 to 1891 the professorship of natural science in Rockford College, had from 1891 to 1893 studied geology in the graduate department of the Johns Hopkins University, and in 1893 had received the degree of Doctor of Philosophy,—a degree never bestowed as yet by that university on any other woman. From 1893 to 1895 Dr. Bascom had held the post of Assistant in Geology and Instructor in Petrography in the Ohio State University, a post which she resigned at a considerable financial sacrifice on

account of the opportunities for original research afforded by the few hours, the advanced character of the teaching required, and the admirable geological formation surrounding Bryn Mawr College.

The large number of students in English, and more especially in the graduate English courses, made it necessary to establish a lectureship in English literature, and Mr. Alfred Hodder was appointed to the post. After being admitted to the bar of Colorado, Mr. Hodder had studied in the graduate school of Harvard University in 1890-91, had held the Morgan Fellowship in Harvard University in 1891-92, and in 1892-93 had studied abroad in Freiburg and Berlin.

In the general course in required philosophy a rearrangement of the work for the following year was necessitated by the death of Dr. Rhoads, who had held the professorship of Christian ethics, and Dr. Barton, Associate in Semitic Languages and Biblical Literature, was asked by the Trustees to deliver the lectures on Christian ethics hitherto delivered by Dr. Rhoads.

A complete list of the appointments and promotions in the faculty, as well as a list of the appointments in the staff of instructors, demonstrators, and other officers, will be found in the appendix to this report. With the exceptions already noted of Dr. Hopkins and Mr. Bury, and with the exception of Dr. Ross Granville Harrison, who during Dr. Morgan's year of absence in Europe filled the vacant post in morphology with marked success, all the members of the faculty for 1894-95 will remain at the College during 1895-96. Of the readers, also, all but two were reappointed. Dr. Frederick M. Page resigned the readership in Italian and Spanish, and Miss Phoebe A. B. Sheavyn resigned the readership in English to accept the English fellowship. The reorganisation of the

Italian and Spanish courses and of the department of Romance Philology received careful consideration, and pending a final adjustment the appointment of a reader in Italian for the next academic year was authorised.

Miss Florence E. Peirce, who for nine years, including one year's leave of absence in Europe in 1890-91, had served the College faithfully and efficiently as librarian, resigned her post in June, to the sincere regret of all connected with the College. It is largely due to her unremitting attention that the library is in its present serviceable condition, completely available on account of its thorough system of card catalogues, and, although used constantly by students, who have access to the shelves from 7 a.m. to 10 p.m., unimpaired by serious losses. Henrietta R. Palmer, Bachelor of Arts of Bryn Mawr College, a graduate of the School of Library Economy of Columbia College, and Associate Librarian of Bryn Mawr College in the years 1893-95, was appointed Librarian, and Jane Bowne Haines, Bachelor of Arts and Master of Arts of Bryn Mawr College, and Fellow in History for the year 1892-93, was appointed Associate Librarian.

Although it is a matter for sincere congratulation that two new subjects are to be added to our college curriculum next year, yet there are two other departments, as yet unrepresented, that claim the careful consideration of the Trustees. Our department of philosophy is seriously crippled by the lack of laboratory teaching in physiological psychology, and the course in advanced psychology given last year suffered materially both in interest and completeness from the want of laboratory experiments. Two separate attempts have been made at different times to supply this need: in the two academic years from 1887 to 1889 Dr. James McKeen Cattell,

now of Columbia College, delivered lectures on physiological psychology, and in 1890, courses in physiological psychology were organised by Dr. Jacques Loeb, Associate in Biology, at the request of the students, who have always taken a keen interest in this line of work. Some provision for the teaching of physiological psychology, whether by the foundation of a lectureship or of an associateship, should, if possible, be made during the next academic year.

During the past year my attention has also been called in a very especial manner to the subject of pedagogy, or the teaching teachers how to teach, as a branch of the college or university curriculum, and more especially of the college or university to which is attached a large graduate school. Unexpectedly opportunities have presented themselves of discussing the present position of the science of education with foreign as well as American scholars, and of examining some part of the voluminous new pedagogical literature, and the working of some of the best-known of the present normal schools. These investigations lead irresistibly to the conclusion that a properly-organised department of pedagogy, connected perhaps with a small practice school like that of Professor Rhein, in Jena, would be of great service to this College. A certain number of our Bachelors of Arts and a greater number of our graduate students engage in the profession of teaching. While in a sense it is true that a teacher is born, not made, even a born teacher may teach better for knowing something of her art theoretically, if not practically, before she begins ; and the question is not merely an educational one, it affects also the wage-earning capacity of our graduates and graduate students. There is reason to believe that the endowment of a chair of pedagogy at Bryn Mawr is not far distant, and this endowment will be welcomed with the liveliest satisfaction.

The need of a library building to contain not only the library proper but professors' rooms and seminary rooms, has proved even greater than heretofore, and the desire has been frequently expressed that the funds for such a building might be obtained and the building erected as a memorial of Dr. Rhoads. In none of the objects needed in the immediate future of the College was his interest more profound.

The special attention of the Academic Council, a body created by the Trustees in the year 1893-94 to regulate the requirements for the higher degrees of Master of Arts and Doctor of Philosophy, was given to the important subject of further defining the requirements for these degrees at Bryn Mawr College. A committee, consisting of Professors Hopkins, Warren, Keasbey, Mackenzie, and Lodge, carried on an extensive correspondence with other universities and colleges in this country and abroad, tabulated the requirements made by them, and brought in recommendations defining more exactly the general requirements announced in the program and approved by the Trustees. After careful consideration the recommendations of the committee were adopted by the Academic Council and were put into immediate operation. It was voted in the Council to require all applicants for the degree of Master of Arts or Doctor of Philosophy to file applications with a Graduate Committee consisting of the President of the College as permanent Chairman and three members of the Council, elected for the term of one, two and three years respectively, and to entrust to this committee the duty of accepting or rejecting these applications after full consultation with the heads of the departments in which the degrees were to be taken.

Two formal assemblies were held during the year ; — the Memorial meeting in honor of the late Dr. James E. Rhoads, on January 2nd, all the proceedings of which have been fully set forth elsewhere, and the annual conferring of degrees on June 6th.

A full list of the degrees conferred and of the fellowships and scholarships awarded for the year 1895–96 may be found in the appendix to this report. After the degrees had been conferred Professor Basil L. Gildersleeve, of the Johns Hopkins University, delivered an address on “The Spiritual Rights of Minute Research,” which was afterward printed in pamphlet form in order that such genial and inspiring words might reach a wider circle of our friends.

At the request of the President the Trustees voted to omit the inaugural ceremonies that usually mark the beginning of a new president’s administration. The coöperation between the first President of the College and the Dean of the Faculty had been so close during the past nine years that the closing of the former and the opening of the present administration marked a continuance rather than a change of policy.

A full list of the speakers who have addressed the College as a whole, the Graduate Club, the Philosophical Club, the Christian Union, the De Rebus Club, the Missionary Society, or the Temperance Association will be found in the Appendix to this report.

It is a matter for congratulation that in times of unprecedented financial depression, in which many great colleges and universities have remained stationary, or have lost appreciably in students, the growth of this College has shown its usual rate of increase. The numbers in our graduate school are especially to be noted because of the great number of graduate departments recently organised throughout the

country, or recently for the first time thrown open to women. A table showing the increase for the past ten years and the degrees conferred during these years will be found in the appendix to this report.

The entire number of students enrolled during the year was 283, an increase of 40 as compared with the enrollment for the preceding year. There were 49 graduate students, including fellows. The number of graduates was more than one-sixth of the whole number of students. Of the undergraduates 232 were candidates for the degree and 2 were "hearers." There were 245 students resident in the college halls, and 38 non-resident.

The two hundred and eighty-three students enrolled during the past year may be classified according to states and countries as follows:

Maine, 3 ; New Hampshire, 3 ; Massachusetts, 19 ; Rhode Island, 4 ; Connecticut, 9 ; New York, 43 ; New Jersey, 16 ; Delaware, 6 ; Pennsylvania, 98 ; Maryland, 14 ; Ohio, 4 ; Indiana, 13 ; Illinois, 5 ; Iowa, 5 ; Michigan, 1 ; Wisconsin, 2 ; Minnesota, 2 ; California, 2 ; Kentucky, 6 ; Virginia, 3 ; West Virginia, 1 ; Alabama, 1 ; North Carolina, 2 ; Georgia, 2 ; Louisiana, 1 ; District of Columbia, 3 ; Missouri, 1 ; Arizona, 1 ; Kansas, 1 ; Oregon, 1 ; Nevada, 1 ; Canada, 3 ; Nova Scotia, 1 ; Great Britain, 5 ; Japan, 1.

The distribution of students in the above table shows that Bryn Mawr is winning for herself a national reputation, and is in no sense of the word a local institution.

The distribution of the students among the several departments was as follows :

Sanskrit and Comparative Philology, 5 ; Greek, 44 ; Latin, 80 ; English, 169 ; Anglo-Saxon, 11 ; German, 51 ; Gothic and Teutonic Philology, 3 ; French, 44 ; Old French, 2 ;

Spanish, 7 ; Italian, 8 ; Semitic Languages and Biblical Literature, 9 ; History, 82 ; Political Science, 46 ; Philosophy, 51 ; Biblical Study, 39 ; Mathematics, 35 ; Physics, 17 ; Chemistry, 66 ; Biology, 52.

More has been done in the past year than in any of the years preceding toward rendering accessible to poorer students the facilities for study we possess. Miss Ethel Powers, of New York, the sister of Miss Anna Powers, a graduate of the class of 1890, who died in the beginning of the last academic year, presented to the College a scholarship of \$200, to be known as the Anna Powers Memorial Scholarship, and to be annually awarded to an undergraduate student of at least one year's standing who finds herself in need of financial aid. The Alumnae of the College undertook to raise a fund of \$8,000, to be known as the Dr. James E. Rhoads Endowment Fund, and have thus far actually raised over \$5,000. The interest of this fund is to be applied to the aid of undergraduate students. Contributions to the amount of over \$650 were received during the year by the Committee of the Students' Loan Fund. It is a fact well known to our Secretary's office that many students are turned away from Bryn Mawr every year on account of the lack of undergraduate foundations and undergraduate scholarships, such as exist in other colleges ; and our graduate department also would be greatly strengthened by the addition of more fellowships and scholarships.

Much attention was given during the past year to the college grounds and buildings, to the perfecting of appliances for safety in case of fire, and to the elaboration of plans for the future planting and laying out of the college grounds. The east wing of Pembroke Hall was finished by September

1st. By the construction of sound-proof music rooms under this wing provision was made for the first time for the needs of students wishing to keep up their music during their college course. There was also provided on the ground floor a large sitting-room for the use of non-resident students, which has added greatly to their comfort. This wing was completed within the time specified by the contract, and was furnished by October 1st, and immediately occupied by thirty-eight students. After a year's experience the pantries and store-rooms of Pembroke Hall proved too small, and through the summer extensive alterations both in the kitchen facilities and in the heating system were carried out by the architects.

By the building of Pembroke Hall the College crossed the boundary line separating the large college from the distinctively small one, and during the year the practical administration of the president's office was successfully adjusted to these changed conditions. The ordinary repairing and carpentering had so increased that it no longer seemed an economical plan to give out the work to contractors. A head carpenter was engaged, and the carpenter's shop moved from the basement of Taylor Hall to the disused laundry over the central boiler house, which was altered and equipped with carpenter's tools and supplies of all kinds, and throughout the year all the college work was done on the premises at a cost much less than the previous cost of such work.

In like manner it was found that the time had come to engage a thoroughly competent engineer, able himself to carry out changes in the heating system, make repairs, and keep the various boilers in good condition. The necessity of this step was shown by the thoroughly unsatisfactory state of the

central Harrison boilers, which had suffered much at the hands of unskilled firemen, and on which \$500 had to be spent before the opening of the academic year. It was a significant fact that two engineers, anxious for the post, refused it after examining the boilers. By unremitting attention throughout the year the whole heating system was carefully repaired ; an excellent engineer, with a staff of three day and two night firemen, was put in charge, and an engineer's shop stocked with all necessary implements fitted up in the boiler house. Good results were immediately obtained ; Dalton Hall, for example, which had never been even moderately well heated, was thoroughly comfortable throughout the unusually severe winter of last year, and the dynamo of the physical department was for the first time properly managed ; and in many other ways a marked difference showed itself.

In the academic buildings various pieces of work, such as the fitting up of special rooms for the use of different departments, and more especially the proper fitting up of the physical laboratories in Dalton Hall, had been postponed from year to year until they could be postponed no longer ; and the renewal of much of the apparatus that had been in use for the past ten years had become a matter of necessity. Had not the College been fortunate in securing gifts to meet these exceptional expenditures, the requisite work could not have been done without seriously crippling our academic departments. Some of the more important alterations and additions made are here briefly enumerated. In Taylor Hall the large lecture-room over the inner library was entirely shelved in order to provide for the overflow of books from the general library. In the library itself three new cases were added, and several other important alterations effected in the historical

and political seminary. One side of the room was shelved, the tables were so altered that the room now accommodates the very large number of students belonging to the historical department, the walls were painted, and a gift from a friend of the College enabled us to cover the walls and the four sides of the two square pillars that divide the room with engravings and photographs of men and women famous in European and American history. All the floors in Taylor Hall and all the staircases were re-stained and re-oiled, and the exterior of the hall was entirely renovated, the masonry being pointed, and all the outside wood-work painted. In Dalton Hall the Rowland Grating room on the fourth floor was for the first time fitted up for the use of professors and graduate students in the department of physics. The tables in the large chemical laboratory were fitted with locked cases for apparatus; these cases, which had at first been dispensed with for reasons of economy, having proved absolutely necessary if an account was to be kept of the breakages of the students. A workshop for the making of physical apparatus was fitted up in the basement of Dalton Hall; the physical laboratories were provided with tables for advanced work and with the necessary shelving; and an expert physical instrument maker has been employed ten hours daily throughout the year in making pieces of apparatus for use in instruction in physics and in physiology. In Merion Hall the entire system of plumbing was renewed. In the Gymnasium extensive additions and alterations were necessitated by the construction of the swimming-tank. A drying room for bathing suits and fourteen new dressing-rooms were provided in the basement. An additional coil for heating purposes was placed in the neighborhood of the pool, and under the direction of the professor of physics an electrical connection was made between the

boiler-house and the swimming-tank, in order that the temperature might be moderated at pleasure. The steam-main carrying heat to the gymnasium from the boiler-house, which proved to be completely eaten away, was replaced by a new two-inch wrought-iron pipe carefully boxed. Over one thousand dollars was expended in putting the boiler-house in complete repair.

Our means of protection from fire were especially considered, and a gift of \$1,448.87 was obtained in order to make extensive improvements and modifications in the existing system. At the beginning of the year, the pump in the boiler-house having proved to be in need of very serious and extensive repairs, it was replaced by a Worthington Underwriters' 500-gallon fire pump, $14 \times 7\frac{1}{2} \times 12$, intended not only to serve the purpose of the former pump in supplying the college halls with water, but also to afford protection in case of fire. The introduction of this pump necessitated an enlargement of the pipes leading from the pump to the cistern, and an eight-inch wrought-iron suction-pipe was put in. Since the new swimming-tank under the gymnasium holds 66,500 gallons of water, it seemed best to connect this reserve supply of water with the fire-pump; a six-inch suction-pipe was accordingly put in, tapping the water in the tank a few inches from the bottom. The work was one of some difficulty, because the pipe had to be laid at a considerable depth, and in digging a great deal of rock was encountered. A large number of covered buckets to contain both water and sand were placed in the various college buildings, and the supply of Miller fire extinguishers was largely increased. Ladders and a jumping-net were purchased. The linen hose belonging to the College being carefully tested and found not to hold water, four hundred feet of new $2\frac{1}{2}$ -inch rubber-lined hose of

the best quality were purchased; and this necessitated the purchase of a hose-cart of the most approved model, capable of carrying eight hundred feet of hose. The couplings, both on the fire-plugs and on the hose, being found old-fashioned and unsatisfactory, all the fire-plugs and every hundred feet of hose were fitted with Jones's couplings.

Since, during the academic year, only the night watchman, the night firemen, and the farmer, and during the summer only the night watchman and the farmer could by the existing arrangements be immediately summoned, it was thought best to connect a steam fire-whistle with the direct main high-pressure steam-line in the central boiler-house, so that it might be possible to summon at once the men employed by the College who live in the village and all other available assistance. The whistle now in use can be distinguished without difficulty five miles and more from the College. At the request of the President fire brigades of the students were organised in each of the halls of residence, and a high state of efficiency was maintained, largely through the efforts of our English students, who have been captains of such brigades in the English colleges of Girton and Newnham. During the year three slight fires were put out by these brigades. In the year 1893-94, a complete system of electric fire alarms, not mentioned in the president's report for that year, had been placed in all the halls of residence. These alarms can be rung both from the outside of the hall and from different points within the hall, and the gongs are sufficiently loud, it is believed, to arouse every student. On account of this improved fire service it has been found possible to reduce the rate of the insurance policies on college buildings falling due within the year from seventy-five to seventy per cent.

In the careful provisions against fire thus made in connec-

tion with the boiler-house, the one thing not foreseen had been that the source of protection itself should burn. On the 26th of July, between 1 and 2 a.m., it was discovered that the boiler-house was in flames, the fire having in all probability started in the carpenter's shop in the second story of the building. All efforts were directed to saving the surrounding buildings ; in the boiler-house itself the flames had gained too much headway to be checked, and the boilers themselves and the fire pump on which the entire water supply depended were in the centre of the fire. As the night was absolutely still, even the nearest buildings were uninjured. It was, of course, necessary that the boiler-house should be immediately rebuilt, and in the absence of the Chairman of the Committee on Buildings and Grounds and of the President of the College, Henry Tatnall gave the matter his close personal attention. In order to avoid a recurrence of a similar catastrophe, the shops were entirely done away with, and the boiler-house was rebuilt with iron roofing and entirely fire-proof. Very little damage had been done to the boilers and pumps ; they were repaired under the direction of the college engineer, who was able to make many improvements in the plant. There was no insurance on the building, or on the shops or boilers. Until the close of the past fiscal year the amount charged to the Fire Loss Account was \$1,396.50: it is probable that at least \$2,000 must be added to this account.

It should be noted that our water supply in case of a serious fire is inadequate. The capacity of the tanks in the various halls and academic buildings, connected, except in the case of the tank in Taylor Hall, with the fire hose on the floors of the several buildings, but available for the interior of those buildings only, is as follows :—Taylor 2,700 gallons, Dalton 6,165 gallons, Radnor 3,375 gallons, Denhigh 2,250

gallons, Pembroke East 10,125 gallons, Pembroke West 10,125 gallons. Apart from these tanks we have at our command only the underground cistern to the north-east of Merion Hall, containing when it happens to be full, 77,280 gallons, the swimming tank with a capacity of 66,500 gallons, and the tank in the boiler-house containing 2,229 gallons. To secure temporary protection from fire, while the boiler house was rebuilding, a connection was at once made between the main of the Bryn Mawr Water Company on Merion Avenue and the nearest section of the college fire-line. By reason of this connection we can hereafter count on the supply of the Bryn Mawr Water Company when our own reserve is exhausted, but the pressure is insufficient to throw the water thus obtained above the second story of our buildings.

The swimming-tank which has proved so important a part of our water supply was one of the chief pleasures of the year. Constructed during the summer of 1894 from gifts contributed by the students, alumnae and friends of the College, it was open to the students daily on week days from 7 a.m. to 10 p.m., the water being at its full depth for the first four days of the week, during which time the pool was used by swimmers only, and lowered on Fridays and Saturdays to the depth of four and a half feet for the benefit of those who had not yet learned to swim.

The success of the swimming tank stimulated anew the students' interest in the creation of an athletic ground. It was found that the conformation of the land in the hollow below the professors' houses on College Hill would permit us to construct there, at moderate expense, a large level field enclosed by a raised bicycle track fifteen feet in width and four laps

to the mile ; and that this field, which, during the spring and autumn could be used for basket ball, tennis, and other games, could in the winter be converted into a large skating pond. According to the estimates the sum of \$4,164 would enable us to complete the work. The need is a very real one, as at present the students have no place large enough for their games, no private place where they may learn to ride the bicycle, and no suitable place for skating. The Dove Mills Pond, which is now used, is a cause of considerable anxiety, since a very rapid stream flows through it, the ice is often very thin, and the depth is in many parts very great.

Until the present year the College has never owned a map indicating the location of the different water supply pipes, fire mains, gas pipes, and drainage system, our knowledge of the location of all these different systems depending on the memory of an employee who had been for the past nine years in charge of all such work. In view of the difficulties likely to arise from this state of things, Mr. Samuel M. Garrigues, a civil engineer who had been consulted about much of the work in past years, was employed to make a detailed map, wherever necessary digging up the ground in order to locate as exactly as possible the different pipes. He was also asked to include in this map the new property purchased from the Kennedy estate and College Hill, marking on it all the principal shrubs and trees, taking the levels every two feet on the College grounds proper, and every five feet on the newly acquired property and on College Hill. This map has proved of the greatest service during the past year.

By a vote of the Trustees the well-known landscape gardener, Mr. Frederick Law Olmsted, who stands at the head of his profession, both in America and abroad, was

last June consulted in regard to the future laying out of the grounds. He and his son, Mr. John C. Olmsted, spent a day at the College in examination of the grounds and in consultation with Justus C. Strawbridge, the only member of the Committee on Buildings and Grounds able to be present, and with the President of the College. Since that time his son has twice visited the College, and will soon be able to present preliminary suggestions.

An important and much needed improvement very closely affecting the material interests of the College was continued and will in the coming year be completed by the Township.

Before 1896 all the roads inclosing the college property will have been macadamised. Toward the macadamising of the road that passes in front of Pembroke Hall the College contributed \$220 obtained through the generosity of a friend. A gift from the same friend enabled us to complete a new system of boardwalks, for the most part four feet in width, connecting all the buildings on the college grounds, and the professors' houses on College Hill.

A fifth professor's house was added during the year. Plans and specifications were prepared by Cope and Stewardson, and the house was entirely completed by August 31st, at a total cost of \$6384.28, including the expense of a macadamised road and a good deal of rather troublesome and expensive grading. This cottage, which is occupied by Dr. Charles M. Andrews, seems to have impressed everyone as the most satisfactory in its external and interior arrangements of the professors' houses.

The attention of the Trustees is especially called to the full information in regard to the working of the College during the past year given in the appendix to this report. The

appendix contains the list of re-appointments and changes in the instructors and officers for the year 1895-1896; a brief statement of the scholastic work of the past academic year, compiled from the reports prepared by the professors and instructors in the various departments; a tabular statement of the courses of instruction ; the report of the librarian ; a list of the fellowships and scholarships awarded for the year 1895-96; the names of candidates receiving degrees during the year; a tabular statement of the increase in the number of students and the degrees conferred during the ten years from 1885 to 1895; a tabular statement of the distribution of students in the various departments of study during the same ten years; the gifts made to the College during the year; a list of the speakers who have addressed the College; the titles of the scientific publications of the faculty that have appeared in the past year; and the memorial resolutions in honor of Dr. James E. Rhoads, adopted by the Trustees, the Faculty and the Alumnæ of Bryn Mawr College.

October 11th, 1895.

M. CAREY THOMAS,
President.

APPENDICES.

Re-appointments and Changes in the Academic Staff and in the Officers of Administration for the Year 1895-96.

EDWARD WASHBURN HOPKINS, PH.D., resigned to accept a Professorship of Sanskrit in Yale University.

HERMANN COLLITZ, PH.D., re-appointed Associate Professor of Comparative Philology and German.

CHARLES MCLEAN ANDREWS, PH.D., promoted to be Associate Professor of History.

GONZALEZ LODGE, PH.D., promoted to be Professor of Latin.

ARTHUR STANLEY MACKENZIE, PH.D., re-appointed Associate Professor of Physics.

JAMES DOUGLAS BRUCE, PH.D., re-appointed Associate in English Philology.

THOMAS HUNT MORGAN, PH.D., promoted to be Professor of Biology.

JOSEPH W. WARREN, M.D., re-appointed Associate Professor of Physiology.

DICKINSON SERGEANT MILLER, PH.D., re-appointed Associate in Philosophy.

ELMER P. KOHLER, PH.D., re-appointed Associate in Chemistry.

ROBERT GREGG BURY, A.M., resigned Lectureship in Greek and Latin Literature.

MORTIMER LAMSON EARLE, PH.D., appointed Associate Professor of Greek and Latin.

PAUL ELMER MORE, A.M., appointed Associate in Sanskrit and Classical Literature.

ALFRED HODDER, appointed Lecturer in English.

RICHARD NORTON, A.B., appointed Lecturer in the History of Art.

ROSE CHAMBERLIN, re-appointed Reader in German.

FREDERIC M. PAGE, resigned Readership in Romance Languages.

ABBY KIRK, A.B., re-appointed Reader in English.

HARRIET RANDOLPH, PH.D., re-appointed Demonstrator in Biology and Reader in Botany.

FLORENCE V. KEYS, A.B., re-appointed Reader in English.

THÉRÈSE F. COLIN, A.M., re-appointed Reader in Romance Languages.

PHOEBE A. B. SHEAVYN, resigned the Readership in English and was elected Fellow in English.

FLORENCE BASCOM, PH.D., appointed Reader in Geology.

ALICE BERTHA FOSTER, M.D., re-appointed Director of the Gymnasium.

ELIZABETH BATES, re-appointed Assistant in the Gymnasium.

MARY SHERWOOD, M.D., re-appointed Lecturer on Hygiene and Physician of the College.

HENRIETTA R. PALMER, A.B., promoted to be Librarian.

JANE BOWNE HAINES, appointed Associate Librarian.

ISABEL MADDISON, B.Sc., appointed Assistant Secretary to the President.

MARY HARRIS, A.B., appointed Recording Secretary.

MRS. REGINALD CHASE, MRS. DERKHEIM-IRWIN, and Miss SOPHIA KIRK were re-appointed to the charge of Radnor Hall, Denbigh Hall and Merion Hall respectively.

MISS ALICE RAWLE NEWBOLD resigned the charge of Pembroke West, and Miss IDA GARBER was appointed in her stead, having resigned the charge of Pembroke East. Miss LAURETTE EUSTIS PORTS was appointed to the charge of Pembroke East.

Report for the academic year ending June 6th, 1895, compiled from the statements submitted to the President of the College by the instructors in the various departments.

Sanskrit and Comparative Philology.

Dr. Edward W. Hopkins conducted a graduate class in Beginners' Sanskrit, one hour weekly throughout the year. Selections from Lanman's Reader, part of the Nala, and a few Vedic Hymns were read by the class. Dr. Hopkins also delivered a graduate course of lectures on Comparative Philology (forms and syntax), one hour weekly throughout the year.

Greek.

Dr. Herbert Weir Smyth conducted the graduate work in Greek. The instruction centered upon Thucydides, whose entire history was read by the members of the class. In the department of graduate Greek, emphasis is laid upon the necessity of reading large masses, if not the entire work, of the author chosen for the year, in the belief that sympathetic appreciation of the genius of an ancient classic and sound philological study of his text can be obtained only in this way. In addition to reading the text of the historian, the class interpreted narrative portions of the second book and the Funeral Oration of Pericles (once weekly), wrote exercises modelled on the style of Thucydides (during the first semester), and translated the inscriptions in Hicks' Greek Historical Inscriptions to the end of the Peloponnesian War (pp. 1-115). Lectures were given by the instructor on the following subjects: Ullrich's theory of the composition of Thucydides' History ; the dialect, syntax, and style of Thucydides ; the development of prose style from Herodotus to the end of the fifth century, B.C. ; the treaties in Thucydides ; and the form and contents of Greek historical inscriptions. The members of the class submitted, at the end of the year, papers on the following subjects: abstracts and criticisms of the following treatises of Dionysius of Halicarnassus : *De Thucydide judicium*, *Epistola ad Cn. Pompejum*, *De iis quae Thucydidi propria sunt* ;

other ancient criticisms of Thucydides ; ancient imitators of Thucydides ; the historical present in the first three books of Thucydides.

The undergraduate courses in the minor, major and post-major were given by Dr. E. W. Hopkins, Dr. H. W. Smyth and Mr. R. G. Bury, as laid down in the program without change. The Lecturer on Classical Literature reports that the work done by students in the department under his charge has been on the whole of a decidedly satisfactory character. In the first semester two hours a week were devoted to lectures on the history of the Greek epic and lyric poetry. In the second semester an equal time was spent in lectures on the Greek drama and dramatic poets, accompanied by a less exhaustive survey of Greek prose and poetry down to the Alexandrine period. An attempt was made throughout to combine accuracy of detail with a clear view of the general lines of literary development ; and the students were required to supplement the knowledge supplied in the lectures by reading, either at first hand or in English translation, selected portions of the more important authors dealt with.

The class in elementary Greek, conducted by Dr. Smyth, studied the greater part of White's Beginners' Greek Book, two books of the Anabasis, and two and a half books of the Iliad. The fact that a larger number of students elected it than ever before proves that the interest in this course is not flagging.

Latin.

Dr. Gonzalez Lodge conducted the graduate work in Latin. The courses comprised four hours weekly during the year, and were divided as follows, the main subject of study being the development of historiography among the Romans.

One hour weekly was devoted to seminary interpretation by the students themselves, and the subject treated was the opening chapters of the twenty-first book of Livy.

In connection with this Dr. Lodge gave a course of lectures, one hour weekly, on Livy and Tacitus, treating historically, and from the point of view of the sources, their lives and works, and the history and condition of the text.

He also lectured for one hour weekly on the fragments of the Roman historians from the earliest times down to Livy. This took

up the whole of the first semester. In the second semester Dr. Lodge interpreted, during this hour, the opening chapters of the *Annals* of Tacitus.

A fourth hour was devoted to the reading of Rushforth's collection of "Latin Historical Inscriptions" until Christmas, after which time there were lectures on the moods and tenses of the Latin verb until the end of the year.

In the undergraduate department the work was approximately the same as in previous years. In the Minor Course Dr. Lodge read Livy, Books XXI. and XXII., two hours weekly until Easter, after which he took up Cicero *de Senectute*; in connection with the latter the class read *de Amicitia* at sight. Weekly exercises in Latin composition were conducted as in previous years, and the private reading was likewise the same, viz., Vergil, *Æneid*, VII.-X.

With the major class Dr. Lodge read Tacitus, *Annals*, I.-VI., so far as the Life of Tiberius was set forth therein, three hours weekly during the first semester, and selected satires of Horace and Juvenal and selected elegies of Tibullus and Propertius during the second semester. The private reading was the same as in previous years, viz., selected letters of Pliny and Cicero.

In the minor course Horace was read by Mr. R. G. Bury, two hours weekly as announced in the program. In the major course, in the first semester, two hours a week were devoted to lectures on the earlier Latin poetry and prose.

In the second semester an equal time was spent in lectures on the Roman prose and poetry of the Ciceronian and Augustan periods, followed by a sketch of the early literature of the empire.

With the post-major class Dr. Lodge read Terence two hours weekly during the first semester, and Plautus during the second. In the first semester the class read critically the *Heauton Timorumenos*, and rapidly the *Andria*, *Phormio*, and *Adelphi*. In the second semester Plautus's *Captivi* was selected for critical study and the *Menaechmi*, *Trinummus* and *Rudens* for rapid reading. Mr. Bury read with the same class selections from Lucretius twice weekly during the first semester, and selections from Catullus twice weekly during the second semester; and lectured on Latin Prose Composition once weekly throughout the year.

English.

The graduate work in English was conducted by President M. Carey Thomas, Dr. Mary Gwinn, Dr. James Douglas Bruce and Miss Phœbe Sheavyn, as laid down in the program.

A graduate class in the Early English Drama met twice weekly throughout the year. President Thomas opened the course, and lectured for the first six weeks ; the remaining lectures being given by Miss Sheavyn.

Dr. Gwinn met a class composed of graduate and undergraduate students in Critics of the Nineteenth Century, twice weekly throughout the year.

Dr. Bruce lectured to graduate students twice weekly throughout the year on the Old English system of sounds and its relation to the systems of the cognate Teutonic languages, discussing briefly toward the close of the course the Middle English vowel system. At the end of each semester a few meetings were devoted to practical exercises in the application of the principles expounded in the lectures.

Dr. Bruce also conducted a graduate course on the poems of the Exeter Book, twice weekly throughout the year. The minor epic and elegiac poems were studied with especial reference to the history of the construction and interpretation of the text, and a full commentary on the relation of the epic pieces to the chief Germanic saga-cycles was given. A course of lectures on the main features of the Old English syntax with reference to their development in Middle and Modern English accompanied the translation of *Guthlac* and *Crist*. Reports on important articles relating to the subject of the lectures were from time to time required of the students. A few dialectic texts from Sweet's *Second Anglo-Saxon Reader* were read at the conclusion of the course.

Dr. Bruce met a class of graduate students twice weekly throughout the year for practice in translation especially. The *Elene*, more than half of the *Genesis*, and two books of the Anglo-Saxon version of Bede were read in this way. Reports were made by the students on the more important articles and dissertations that relate to these texts.

The undergraduate courses were conducted as usual. A class of one hundred and seventy students attended, three hours weekly

throughout the year, President Thomas' lectures on English literature, covering the period from the time of Shakespeare to the present time.

The essay work of the first and second year, in connection with the lectures on English literature, equivalent to two hours weekly, was conducted as usual by Dr. Gwinn, assisted by Miss Abby Kirk in the first year, and by Miss Keys in the second year. In the first semester of the first year's work fifty-nine students were registered, fifty-four of whom did full work. Two rhetoric papers (abstracts of Wendell's *English Composition* and Genung's *Practical Rhetoric*) were written, and one essay. In the second semester fifty students were registered, forty-four of whom completed the course. During the first eight weeks a study was made of the construction of the essay, *Essays in Criticism* being used as the basis of the work. Four papers were written and weekly meetings of the class were held. The last half of the semester a second essay was written. Miss Kirk met each member of the class twice during the year for private work, besides being "at home" to the class for general consultation, three hours of each week.

The second year's work was similarly conducted, Miss Keys meeting the members of the class, both individually and together, for conference and advice. Each student in the course wrote four carefully prepared essays.

The George W. Childs essay prize for the year was awarded by the English Department to Miss Edith Pettit, of Philadelphia.

A minor class in Anglo-Saxon met Dr. Bruce three hours weekly throughout the year for the first year of the major course in English. The *Outlines of Anglo-Saxon Grammar* and a majority of the prose selections in Bright's *Reader* were studied in the first semester. During the second semester, in addition to the specimens of Anglo-Saxon poetry included in Bright's *Reader* about one-half of *Beowulf* was read with the class. In the earlier part of the semester the class was practiced in the scansion of the alliterative verse according to Sievers's system as expounded in lectures accompanying the reading. Lectures were also given in the elements of myth, saga and history contained in *Beowulf*, on the chief theories that have been proposed regarding its composition, and on questions of Teutonic antiquities in general

suggested by the text. The same class also met Dr. Bruce twice weekly throughout the year in Middle English. The grammatical introduction to Sweet's *First Middle English Primer*, with his selections from the *Anceren Riwele*, were first studied. The rest of the first semester was devoted to the reading of about one-half of *Piers Plowman* and the whole of the *Pearl*. During the second semester about two-thirds of *Sir Gawayne and the Green Knight*, a portion of *Guy of Warwick*, and the pieces in Morris and Skeat's *Specimens of Early English*, Part I., were read with the class. Lectures on the documents from which the *Specimens* are drawn were given by the instructor. As parallel reading to *Piers Plowman*, Jusserand's work on Langland, and his *Wayfaring Life in the Middle Ages*, were read by the class.

Teutonic Philology.

Dr. Hermann Collitz conducted graduate courses in Teutonic Philology. Owing to the fact that instruction had to be given to graduates who were pursuing advanced courses in Germanic in their first, second, and third years of study, the number of graduate courses has been larger than usual, six different courses having been given in the first semester, and seven courses in the second semester. The time allotted to each course was restricted to one hour weekly, except that in the first semester two hours weekly were given to the course in Old Norse. The following courses were given :

Gothic. This course was intended for beginners in Gothic, and was conducted in the same way as in previous years, in that the study of Gothic grammar was combined with that of the elements of comparative Aryan grammar. For a more detailed account see the president's report for 1893-94.

Old Norse. The elements of Old Icelandic phonetics and inflection were studied in Sweet's Icelandic Primer. Although a first course in Norse, it was conducted as much as possible on historical and comparative principles, a constant comparison being made of the Old Norse sounds and forms with those of the early Teutonic languages. The grammatical part of the course was followed by the reading of selections from the younger *Edda* and of the *Thrymskvitha* from the elder *Edda*.

Old Saxon. In the spring of 1894 Professor Zangemeister, of Heidelberg, found in Rome, in a Latin MS. of the Vatican library, an additional fragment of the Old Saxon *Heliand* and several fragments of a hitherto unknown Old Saxon poem in alliterative verse, whose subjects are taken from the Old Testament, or more especially from the Genesis. The new light thrown by this discovery on Old Saxon literature, the origin of the *Heliand*, and the relation of the Anglo-Saxon *Genesis* to Old Saxon poetry, suggested the idea of a course in Old Saxon, in order to acquaint the students with the results of Zangemeister's find. The course consisted chiefly of lectures, reviewing the sources of our knowledge of Old Saxon, and discussing the literary and philological problems connected with the *Heliand* and the newly-found fragments of the *Genesis*. Owing to the pressure of time the grammar had to be treated rather rapidly, so that it was only possible to point out to the students the chief characteristics of Old Saxon in distinction from Old High German and from Anglo-Saxon. Finally a few specimens of Old Saxon texts were carefully read and analysed with regard to variations in the dialect and differences between the various manuscripts.

Old High German. In continuation of the course in Old High German given in the previous year, several difficult texts from Braune's Old High German Reader (among others selections from the Old High German translation of Isidor's treatise, *Contra Judaeos*, and from Otfried's *Harmony of the Gospels*) were critically read and analysed.

Introduction to the Study of Teutonic Philology. These lectures included an outline of general phonetics (with special reference to Prof. Bell's system), a survey of the Aryan languages, a sketch of the various branches of the Teutonic group, and a brief history of Teutonic philology.

Comparative Teutonic Grammar. (Continued from last year.) This course of lectures was given to students that had previously studied Greek and Latin, as well as Gothic, Old Norse, Anglo-Saxon, Old Saxon, and Old High German. Teutonic declension having been discussed in the previous year, it seemed advisable to spend the current year in a detailed study of Teutonic conjugation. The system of the Teutonic verb and the relation of the different

Teutonic classes to the Sanskrit, Greek and Latin conjugations were explained, and the inflectional endings compared with those of the cognate languages. The course was conducted, as in former years, with a view to encouraging original work on the part of the students.

Teutonic Seminary. A weekly hour was set aside for the seminary in the second semester, in order to discuss some special subjects in historical Teutonic phonetics. Part of the material for the discussion was furnished by investigations begun by two of the graduate students, both of whom expect to carry on their work and later to publish their results.

German.

Graduate students in German followed the courses offered by Dr. Collitz in Teutonic languages. Miss Chamberlin also conducted a course in Fritz Reuter's "Ut mine Stromtid."

The minor and major courses, of five hours weekly each, were arranged as in previous years, two hours weekly in each course being given to lectures on German literature (delivered in German), and three hours weekly to critical reading, prose composition and practice in conversation.

In the minor class, the lectures given by Dr. Collitz covered the classical period of Modern German literature from the middle of the last century to Goethe's death. Two hours weekly of critical reading were spent, under Miss Chamberlin, in reading Schiller's *Wallenstein* in the first semester, and the first part of Goethe's *Faust* in the second semester. Once weekly the class met Miss Chamberlin, for practice in German prose composition and German conversation.

The private reading, on which examinations were held during the year, was, in the first semester, Lessing's *Emilia Galotti* and Goethe's *Iphigenie* and *Egmont*, and in the second semester, selections from various *Volksbücher* and Schiller's *Don Carlos* and *Braut von Messina*.

In the major class Dr. Collitz lectured on the history of German literature from the earliest times to the beginning of the sixteenth century. The last weeks of the second semester, however, were

given to a brief sketch of Modern German literature, from the beginning of this century to the present time. Once weekly, in connection with these lectures, the class read with Dr. Collitz selections from Old and Middle High German works in Modern German translations. With Miss Chamberlin the major students read for one hour weekly, in the first semester, the second part of Goethe's *Faust*, and in the second semester the Goethe-Schiller *Correspondence*. Selected letters were carefully studied, especially those of a critical character, and the works criticised were read privately. The class met once weekly throughout both semesters for prose composition. Three members of the class made marked progress, one writing an exceptionally good short essay in German.

The private reading in the major class included in the first semester Lessing's *Nathan der Weise*, selections from Lessing's *Laoköon*, and Freytag's *Rittmeister von Alt-Rosen*, and in the second semester Goethe's *Tasso*, Scheffel's *Ekkehard*, Keller's *Dietegen*, and selections from various commentators.

Post-major courses in Gothic, once weekly by Dr. Collitz, and in Old High German, once weekly by Miss Chamberlin, were given. This is the first time that undergraduate courses have been offered in the old Teutonic languages. Miss Chamberlin also conducted a post-major class, once weekly, in German dialects, and a class, once weekly, in modern German reading.

The elementary class met Miss Chamberlin five hours weekly during both semesters. The usual work was done in grammar and simple reading. Schiller's *Wilhelm Tell*, Goethe's *Hermann und Dorothea* and *Iphigenie*, Freytag's *Journalisten* and portions of *Soll und Haben*, and Marlitt's *Goldelse*, were read; also numerous selections from prose and poetry were read at sight.

French.

The graduate work in French was conducted by Dr. Fontaine. Two hours a week throughout the year were devoted to the study and reading of French epic poetry. *Huon de Bordeaux*, *Doon de Maience*, *Aliscans*, *le Couronnement de Louis*, were read in the class and discussed. Works of reference on the origin and development of French epic poetry were also consulted and reported upon. One

hour a week was taken up by the study of Old French syntax, the texts used being *Aucassin et Nicolette* and *Extraits des Chroniqueurs Français*. The graduate students have also carried on special investigations in French versification and the dramatic unities.

During the first semester and about one-half of the second the students of the minor class heard lectures by Dr. Fontaine on nineteenth century literature. The prose works of Madame de Stael and Chateaubriand were first studied, and their influence discussed. The most important poems of Lamartine, Musset, de Vigny, Victor Hugo, Théophile Gautier, and Sainte-Beuve were subjected to a thorough analysis, and abundant reading of literary criticism bearing on these poets was assigned to the class. A special study was made of Hugo's *Contemplations*, *Châtiments*, and *Légende des Siècles*.

The eighteenth century literature was studied in the prose works of Montesquieu, Rousseau, and Diderot. One tragedy of Voltaire and one comedy of Marivaux and Beaumarchais were assigned for special work.

The development of French fiction was made the subject of six lectures, and the course closed with the study of French poetry in the eighteenth century, especially that of André Chénier.

An evening hour was selected by Dr. Fontaine for practice in French sounds and conversation. The class was conducted so as to meet the needs of the students of the major course, but no student was refused admission to the class.

The students in the minor course met Madame Colin three times weekly throughout the year for critical readings in French prose and poetry, practical exercises in French syntax and prose composition, sight reading, dictation, and oral practice in French. Balzac's *Eugénie Grandet*, Victor Hugo's *Notre Dame de Paris*, parts of Gautier's *Voyage en Espagne*, and Mérimée's *Colomba* were read and critically studied for the wealth of expression found in those authors. The students were called upon to explain difficult passages, to summarise in French certain parts and to sketch orally leading characters. G. Eugène Fasnacht's French Composition, first year, served as a basis for written exercises. Parallel passages from French and English authors, and finally difficult extracts from representative English authors, such as Macaulay, Green, Froude, and McCarthy, were translated. The students gave proof of close

application, both in preparing and correcting this work in class. For sight reading a number of French plays were chosen,—*Bataille de Dames*, *Le Monde où l'on s'ennuie*, *Le voyage de Monsieur Perrichon*, *La Poudre aux yeux*, etc. These served as excellent models and subjects for conversation and narration. To these were added Daudet's short stories, which furnished very satisfactory results, as shown in frequent oral and written practice.

The major or second year's class met Dr. Fontaine four hours weekly, beside the evening hour selected for French conversation. Two hours were given to lectures on seventeenth century French literature; Racine's tragedies and Molière's comedies forming the centre of these lectures during the first semester. Much time was devoted to the discussion of literary criticism bearing on the nature and scope, excellencies and defects of French classical drama. The moralists of the seventeenth century furnished most of the critical reading done during the two semesters. Some sixty letters of Madame de Sévigné and Boileau's *Lutrin* and *Art poétique* were also read in the class. Fifteen lectures devoted to modern French criticism and the Parnassian school concluded the course in major French literature. Exercises in French composition have occupied an hour each week.

A post-major course has been offered this year by Dr. Fontaine to students desirous of acquiring a reading knowledge of old French texts and some familiarity with the indispensable elements of French phonetics, morphology and derivation. This class has met once a week and read *La Chanson de Roland* (first part) and *Aucassin et Nicolette*.

The students in the elementary course met Madame Colin five hours weekly throughout the year for an introduction to the study of French as required for the matriculation examination, including pronunciation and grammatical forms, reading and translation of ordinary French prose and verse. The study of grammar covered a systematic drill in verbs, regular and irregular, tense, derivation, the writing of exercises to illustrate inflexions, and the principal rules of syntax, with oral translation from French into English and English into French, on the basis of G. Eugène Fasnacht's French Grammar (second year). The work in translation was rendered both literally and idiomatically, special stress being laid upon the pecu-

liarities of French syntax, figurative language and wide vocabulary. Dictation and frequent reading to the students was resorted to in order to make them familiar with the sounds both of the individual word and the complex sentence. Whitney's Reader, extracts from Daudet and Bourget, About's *La Mère de la Marquise*, and difficult passages from recent and contemporaneous authors were made use of to that end. Both students and hearers gave evidence of genuine interest in the language.

Italian and Spanish.

Dr. Frederick M. Page conducted a graduate class in Spanish literature, twice weekly throughout the year.

The minor and major courses in Italian and Spanish were given by Dr. Page, as announced in the program, without change.

Semitic Languages and Biblical Literature.

Dr. George A. Barton gave the following graduate courses:

Hebrew, twice weekly throughout the year. The object of this course was to enable students specialising in New Testament Greek to acquire familiarity with Hebrew as an auxiliary to their New Testament work. The elements of the language were studied and portions of Genesis, Deuteronomy and Judges were read and critically interpreted. The class made good progress, and acquired considerable facility in reading ordinary prose at sight.

History of Israel from the Judges to the fall of Jerusalem in A.D. 70, twice weekly throughout the year. The instruction was given by lectures, in connection with which a careful study of all the Biblical material bearing on the subject was made. Reference was made throughout the course to the works of modern writers, and the members of the class wrote a series of papers, the preparation of which involved an independent study of the turning points of the history and a familiarity with the literature of the subject.

Patristics, two hours weekly till Thanksgiving, and one hour weekly during the remainder of the year. The attention of the class was confined to the sub-Apostolic literature. A general view of the

literature and its critical problems was first given by lectures, then the Epistle of Clement of Rome to the Corinthians, the Ignatian Epistles, the Epistle of Polycarp to the Philippians, the Letter of the Smyrnæans on the martyrdom of Polycarp, and the *Διδαχὴ* were read and critically interpreted. Much seminary work was done by the class in comparing this literature with the New Testament writings.

Old Testament Seminary, once weekly throughout the year. The work of this course was devoted during the first semester to the Psalter. Its structure and growth were studied and a critical examination of several groups of Exilian and post-Exilian Psalms was made. During the second semester the early part of the Book of Exodus was studied, with reference to its linguistic, literary, and historical features. All the work of the class was done by the seminary method and a careful study was made of the abundant literature which has grown up about these subjects.

New Testament Seminary, once weekly throughout the year. The New Testament Apocalypse was studied on the seminary plan textually, hermeneutically and critically. The abundant and discordant literature to which the study of this book has within the last thirteen years given rise was carefully read by the class and an independent examination of the book itself was made in the hope that the work of the class might throw some light on this perplexing problem.

Dr. Barton also conducted the following undergraduate courses:

Biblical Literature, given as a part of general philosophy, two hours weekly in the second semester. The work was done, as in previous years, mostly by lectures. Readings were assigned in various works on the subject; the works most constantly used were Driver's *Introduction to the Literature of the Old Testament* and Toy's *History of the Religion of Israel*. More attention than in former years was given to the Biblical text, and the class gained a fair degree of familiarity with the most important parts of the Bible. Constant comparisons were made of the different books and parts of books, and attention was directed to the organic unfolding of the literature and of religious ideas.

Semitic Languages, major course, four hours weekly. One hour each week of the course throughout the year was devoted to

an historical study of the cuneiform literature and a comparison of it with the literature of the Hebrews, preserved for us in the Old Testament. The discovery and decipherment of the Assyrian inscriptions, the historical development of the Babylonian-Assyrian literature and art, and the place of these peoples in the civilisation of western Asia were studied, and the class became familiar with the numerous points of helpful contact between this literature and the Old Testament.

During the first semester three hours weekly were given to the study of Hebrew. Readings were selected from the Books of Judges and Isaiah; the portions selected were critically read and interpreted, and a special study was made of Hebrew syntax. Harper's *Hebrew Syntax* and Driver's *Use of the Tenses in Hebrew* were used as text-books, and reference was constantly made to other works.

During the second semester the class read Assyrian one hour weekly. The text selected was the hexagonal cylinder of Esarhaddon as published in Winckler and Abel's *Keilschrifttexte*. Especial attention was given in this work to Assyrian syntax as compared with Hebrew. The syntactical parts of Delitzsch's Grammar were supplemented by articles on special points which have been published in *Hebraica*.

A post-major course in New Testament Greek was given two hours weekly throughout the year. During the first semester one hour was devoted to a review of the materials for New Testament textual criticism and the proper methods of applying them. After a study of the leading theories as to the proper way of using the authorities for the text, the students presented in writing studies of difficult readings, through which they learned to handle the evidence themselves. The other hour during this semester was devoted to a study of the New Testament idiom, and the general principles of interpretation, and to a critical reading of the Gospel according to Mark. During the second semester, the Epistles of Paul to the Thessalonians, Galatians, Corinthians and Romans were read and interpreted. Constant reference was made throughout the course to the grammars of Winer and Buttmann and to Burton's *Moods and Tenses in New Testament Greek*. The latter work was carefully read by the class, and in the interpretation of

the text attention was constantly directed to the differences between classical and New Testament syntax. The Gospel according to John was the private reading of the class during the first semester, and the Acts of the Apostles during the second semester.

A free, elective course in the historical outlines of Christian thought was given once weekly throughout the year. The lectures began with a sketch of Christian thought at the close of the Apostolic age, traced its development through the early Christian centuries, outlining with especial care the principles which underlay Greek and Latin thought respectively, then treated mediæval scholasticism, the Reformation and the Christian thought of its formative thinkers, the principles of the early Friends, and closed with an outline of the principal elements in the thought of the eighteenth and nineteenth centuries. The instruction was given by lectures; private reading was assigned throughout the course in the works of Fisher, Hatch, Schaff, Harnack, Stanley, Dorner, and Thomas.

History.

The instruction in history has been conducted by Dr. Charles M. Andrews. Two graduate courses, occupying three hours weekly throughout the year, were given. The first course in historical methods, definition, and criticism was taken by a class of three graduate students, each of whom prepared an original paper upon some aspect of historical criticism, or presented and commented upon critical papers of well-known writers. The lectures followed the plan laid down in the program, but with important changes in arrangement, in that more time was spent on the great collections of historical material and less on the science and philosophy of history. The second graduate course, in the history of Roman law, was taken by three students and covered one hour weekly throughout the year. Special stress was laid this year on the prætorian legislation, and more time than usual was spent on the Roman legal procedure.

The work of the fellow in history has been devoted to the economic history of mediæval England. Under the direction of Dr. Andrews an investigation has been begun into the predial life upon the estates of the abbey of Ramsey in the thirteenth century.

A portion of the study, it is hoped, will soon be published, while the entire investigation will furnish material for a thesis to be presented within a year or two for the doctor's degree. The work is most creditable, and shows on the part of the fellow a special aptitude for minute and exact research.

In the undergraduate department the changes outlined in the program for last year were carried out as there stated, and instead of the full major work (consisting of two minor courses of five hours each weekly for one year), one minor course of five hours weekly to alternate with another course to be given the year following was substituted. Thus the major course, instead of being given each year, is now planned to extend over two years' time. Only five hours a week, therefore, will be devoted each year to the major work, and this plan will make it possible to give post major courses regularly each year and to add one or two new graduate courses. This increase in the number of graduate courses will add to the efficiency of the department and will make it possible to specialise more than has been done heretofore in graduate instruction.

The major work for the year consisted of lectures on the history of continental Europe from 1648 to the present time. During the first semester the class consisted of seventy-two students, three of whom were hearers; during the second semester the number was increased to eighty-one, two of whom were hearers. In consequence of the increase in numbers, a special effort was made to enlarge the hall libraries of historical reference books, begun by the students two years ago. The following books were added to the libraries: Sybel, *Founding of the German Empire* (five copies); Fyffe, *Modern Europe* (five copies); Kitchin, *History of France* (four copies); Lowell, *Eve of the French Revolution* (five copies); Rose, *Revolutionary and Napoleonic Era* (five copies); Probyn, *Italy* (five copies); Murdock, *Reconstruction of Europe* (three copies); Putzger, *Atlas* (five copies); Muller, *Recent Times* (one copy); and twenty-five volumes of the *Epoch Series*. The private reading, however, was not confined to these works. In addition, references were given to the writings of Taine, Tocqueville, Stephens, Sybel (*French Revolution*), Martin, Maurice, the memoirs of Metternich, Pasquier, and Talleyrand, the writings of Mazzini, documents in Martens, Hertslet, and the "Reprints" of the University of Penn-

sylvania. The system of essays was continued and each member of the class translated an article selected from one of the foreign historical journals. Regular monthly examinations were held on the private reading, and the results proved the usefulness of the system employed; interest in the work was maintained, and systematic reading encouraged.

In the post-major course two lectures weekly throughout the year were given on English constitutional history; these were accompanied with careful and critical reading of the texts in Stubbs, *Select Charters*, Prothero, *Constitutional Documents*, and Gardiner, *Select Documents of the Puritan Revolution*. By limiting the study to the constitutional development before 1688, it was possible to take up certain of the economic, municipal, legal, and financial aspects of English history. This was done chiefly by means of reports from members of the class on topics closely connected with the subjects touched upon in the lectures, and thus important texts in Stubbs, the Rolls Series, and Rymer's *Foedera* were brought to the notice of the class. The design of the course was to free the student as far as possible from dependence on lecturers, and to develop a familiarity with independent methods of acquiring and digesting information from scattered collections of material. For this purpose, many of the hours spent with the class were given up to practical exercises, in which the work was rather exegetical than recitative or critical. The course was taken in the first semester by five students, in the second by four.

Political Science.

The courses in political science were so arranged by Dr. Lindley M. Keasbey as to make the transition from one instructor to another as easy as possible.

The minor students were given a course in general political economy as outlined by Mr. Giddings in previous programs.

The course planned by Mr. Giddings in advanced political economy, dealing with the labor problem, was also given to the major students who had gone through one year of political economy with him.

Both the minor and major classes were also given courses in economic geography and demography to fit them for the work of the coming year.

The classes were well attended and the students exhibited both interest and ability in the work.

The methods of instruction were the same as heretofore, namely, lectures, quizzes and written theses.

The instructor wishes to express his appreciation of the kindness and courtesy he has received both from the college authorities and from the students in this first year of his work. Many of the best students are going on with post-major and graduate work next year, and with the experience gained from this year's instruction in minor and major classes the instructor hopes to make the coming year's courses worthy of the high standard of the college.

No post-major or graduate courses were given in 1894-95.

Philosophy.

The required course in philosophy included thirty-four students and met Dr. Dickinson S. Miller three hours weekly throughout the year. The first two months and a half were spent in studying logic, with the aid of Jevons's *Elementary Lessons*, lectures and varied exercises. This work, though not entirely without success, convinced the instructor that in so brief a course logic should be approached in quite a different manner; and this part of the course will be reorganised for next year. The second third of the year was devoted to psychology and the anatomy and physiology of the sense organs. James's briefer *Psychology* was used and some anatomical demonstrations were made. The hours were mainly given to lectures and discussion in connection with the text-book. In the last third of the year, that given up to philosophy proper, Royce's *Spirit of Modern Philosophy*, a historical sketch of philosophical thought since Descartes, was read outside by the students, while the lecture hours were wholly devoted to a discussion of some of the more important problems of philosophy itself. The discussion was led entirely by questions of the instructor or the students themselves, but the results in each subject were summed up and amplified by the instructor. This method, which had been used in the

previous year, has had such encouraging results that it will probably be extended hereafter to the logic and to parts of the psychology. Indeed it has become more and more the special endeavor of the course to draw out the students into free and ready comment and criticism. The instructor regards mere lecturing on philosophic subjects as an inferior, though sometimes necessary, substitute for the method of guided discussion.

The five-hour course, ranking as minor philosophy, was divided into a study, two hours a week, of the history of British philosophy before the nineteenth century, and a study of psychology, three hours a week, each course extending throughout the year. In psychology the course opened with a study of illusions and the theory of perception. Sully's volume on *Illusions* was supplemented by lectures. Taine's work, *On Intelligence*, was then used until the end of the first semester, the study of perception merging into that of the association of ideas and reasoning. During the second semester no reading was prescribed for the class in common, but each student was entrusted with a special subject for research, and assigned a special course of reading, the results of which were embodied in a report read to the class, and in some cases supplemented by the instructor. Students reported on "The Physiological Side of the Emotions;" "Pleasure, Pain and Desire;" "The Instinct of Imitation;" "Instinct and Habit;" "Hypnotism," and "Psychological Problems in Music." The instructor lectured on the psychology of sensation and the sense-organs, will, attention, discrimination, and association.

In the historical part of the course parts of Hobbes's *Leviathan* and Locke's *Essay Concerning Human Understanding*, the whole of Berkeley's *Principles of Human Knowledge*, Hume's *Inquiry Concerning Human Understanding*, and Locke's *Essay on the Improvement of the Understanding*, also fragments of Locke's, Berkeley's, and Hume's other work, were read and discussed in their historical and speculative aspects. In the second semester especially there was much discussion by the class.

In the second semester a free elective was offered on the problems of ethics. The class met for two hours once a week in the evening, and was conducted as a graduate seminary. Several connected problems of ethics were studied, and much and varied read-

ing was assigned. Here again the special aim of the course was to draw the students into discussion. This class included four regular students and several hearers.

There were six regular students in psychology and seven in British philosophy.

Mathematics.

The graduate work in mathematics was conducted by Dr. Scott and Mr. Harkness. Dr. Scott directed the investigations and reading of the graduate students, but did not deliver formal lectures. The work of the fellow, as far as done under her superintendence, consisted of an investigation in the theory of point-groups and curves, in continuation of work begun during the preceding year at Chicago. Direction was also given to other students in reading in Salmon's *Higher Plane Curves* and in the study of cubic curves.

Graduate lectures were given by Mr. Harkness on the theory of substitution groups. In the second semester much attention was paid to Galois's theory and to Klein's polyhedral functions.

In the undergraduate work Dr. Scott met the minor class five times weekly throughout the first semester. Three or four members of the class were quite unable to do the work properly, either from lack of preparation or lack of ability. The presence of these hampered the class, so that the average results as shown in examinations and quizzes were not altogether satisfactory. But two or three members of the class showed decided ability, and speaking of the six or seven that remained in the class in the second semester, it may be said that the work was about of the average standard. In the second semester Mr. Harkness lectured on advanced algebra and trigonometry, theory of equations, and the elements of differential and integral calculus.

Mr. Harkness lectured to the class in major mathematics five hours weekly during the first semester. The work accomplished by the class was thoroughly satisfactory. In the second semester the work was conducted by Dr. Scott in strict conformity with the program. The class was rather a weak one, though for the greater part earnest and painstaking. It was not possible to get through quite as much of the analytical geometry of three dimensions as in some other years.

Dr. Scott delivered a course of post-major lectures in modern analytical geometry twice weekly throughout the year, and Mr. Harkness lectured to post-major students on infinite series and the elements of the theory of functions.

Physics.

For the first time in the history of the department the graduate work was fully organised. Six students took graduate lectures. Three attended the class in the theory of optics given by Dr. A. Stanley Mackenzie; this course began with the discussion of the theories of Fresnel, Green, Cauchy, Kelvin, Rayleigh, and Maxwell. Bassett's text-book was used as a basis. Then double refraction and diffraction with special reference to gratings were discussed very fully; copious references for reading were given to the original papers referred to.

A journal meeting met regularly three times a month, and once a month a meeting of the physical seminary was held, consisting of the instructors and the most advanced students. In the journal meeting articles appearing in the current periodicals were assigned to the members, who reported upon their contents. In the seminary articles were read which had been prepared by the members from all available sources upon some special subject. These meetings have proved of great value to those students participating in them.

During the year a room in the fourth floor of Dalton Hall has been fitted with a Rowland grating; the laboratory facilities have been greatly improved, and the time of the instructors saved, by the appointment of a skilled mechanic who gives two-thirds of his time to the repairing of old apparatus and the construction of new for the department. The appliances and tools in the workshop have been considerably increased. Steam power, which was urgently needed, has been introduced during the summer.

Dr. Buckingham lectured on Thermodynamics to five graduate students, once a week during the first semester, and three times a week during the second semester. The course was designed to give students an idea of modern work, and such as could not be found in any of the text-books obtainable. It began with a short treatment of the first and second laws, after which ten or a dozen

lectures were devoted to simple applications to physics and physical chemistry. The physical problems treated were of the sort indicated in von Lang's *Theoretische Physik*, while among those in physical chemistry were van't Hoff's work on osmotic pressure and parts of Helmholtz and Nernst's work on the galvanic cell. After this preliminary work the second law was taken up again more at length, and with especial attention to generality and precision of statement. The remainder of the course treated of free energy with applications to the galvanic cell, Clapeyron's equation, the plug experiment of Joule and Thomson, etc.; the thermodynamic potential with applications to homogeneous chemical equilibrium (Gibbs' theory of dissociation in gases, etc.) and heterogeneous equilibrium (Gibbs' phase rule). Throughout the course the problems used to illustrate the theory were as varied as possible so as to show the wide range of the subject, though of course completeness in this respect was out of the question. In all cases experimental work and its results, where obtainable, were treated with the theory, and every effort was made to impress on the students the fact that the course was concerned with natural science and not with mathematics. Besides references to such text-books as von Lang, Ostwald, Nernst, Bertrand, etc., references were given as far as possible to all the original papers of importance. In this respect the work was very much hampered by the incompleteness of our library. Without the private libraries of the instructors, the course would be impossible, and the same may be said of almost any advanced course in physical chemistry or physics which we may wish to give. It is imperatively necessary that the library should own a complete set of Poggendorff's and Wiedemann's *Annalen der Physik*. These sets are already rare and the price is rising. For Dr. Buckingham's own advanced courses, which will always be largely concerned with physical chemistry, the instructor has to provide nearly all the reference works himself. The work of the journal meeting and seminary, the most important given for advanced students, is wholly dependent on the library.

The undergraduate work in the minor and major classes was carried out as outlined in the program. Dr. Mackenzie lectured on the general properties of matter, heat and electricity to the minor

class, and on mechanics and optics to the major class. Dr. Buckingham lectured on mechanics, light and sound to the minor class, and on the theories of heat and electricity to the major class, devoting some time to the applications of these theories to physical chemistry. The progress made by both classes in their laboratory work was particularly good, the minor class having also covered more ground than usual. The laboratory work is being made more satisfactory as our stock of apparatus increases. The continuous employment of a skilled mechanic is very advantageous, as it facilitates the construction of instruments designed specially for our use.

A post-major class met Dr. Mackenzie twice a week throughout the year, and heard introductory lectures on the advanced theory of electricity. The students also read privately parts of Mascart and Joubert's and Maxwell's treatises, and prepared papers upon assigned topics.

Chemistry.

The total number of students in the department was seventy; of these fifty have taken the minor course, thirteen the major, four the post-major, and three the graduate courses.

As in previous years the principal feature of the year's work has been the character of the post-major and graduate courses. During the past year a seminary for post-major and graduate students was conducted by Dr. Keiser. To each of the seven students who took part in the work of the seminary selected topics in the field of theoretical chemistry were assigned for study. The results of this study were embodied in papers, and these papers were subsequently read and discussed in the meetings of the seminary. In each case an effort was made to give an accurate and exhaustive account of the present state of our knowledge in regard to the subject under consideration. Some of the topics discussed in this way were: the present position of thermo-chemistry; the laws and generalisations that have resulted from electro- and photo-chemical investigation; principles of energetics applied to chemical and physical equilibrium; mass action and chemical dynamics; the theories of solution, etc.

A course of lectures upon selected chapters of organic chemistry was given to the post-major and graduate students by Dr. Kohler. In connection with this course the graduate students gave a series of twenty historical lectures upon subjects that have been of great interest to workers in the department of chemistry.

As in previous years a journal meeting was held once a week throughout the year for the discussion of current chemical literature.

The most important part of the advanced work, however, has been the experimental work carried on in the laboratory. Investigations have been carried on upon the following subjects: the Action of Metallic Magnesium upon Organic Compounds, a preliminary account of which has been published in the *Journal of the Franklin Institute*, January, 1895, and *Chemical News*, March 8th, 1895; the Metallic Derivatives of Acetylene, preliminary paper in the *American Chemical Journal*, Vol. xiv.; the Atomic Weight of Oxygen; the Atomic Weight of Palladium; the Methods of Preparation and the Transformations of the Aliphatic Sulphonic Acids.

In the undergraduate department, three lectures weekly were given in the minor five-hour course, by Dr. Keiser upon general chemistry, one upon chemical physics, by Dr. Kohler, and one hour weekly was spent under Dr. Kohler in reviews and discussions of the more important and difficult questions dealt with in the lectures and in the laboratory work. In the lectures on general chemistry, after the fundamental ideas concerning chemical action had been discussed, a systematic study was made of the methods of preparation and the properties of typical elements and compounds; and there were introduced from time to time, as the students' knowledge of chemical facts had increased sufficiently to permit of it, brief discussions of the general laws and principles of the science. Thus the students were gradually made familiar with those general conceptions that are embraced under the terms: stoichiometrical laws, atomic and molecular theories, periodic law, theory of valence, mass action, chemical equilibrium, and theories of solution. In this way the minor class in chemistry acquired a general knowledge of those laws and principles of the science which are discussed subsequently more thoroughly and exhaustively in the major, post-major and graduate courses. In addition to these

lectures upon general and descriptive chemistry the minor students followed the course of lectures by Dr. Kohler upon chemical physics. The facts and generalisations of physics that are of especial importance to chemical students were considered in the course, and thus the first year students were prepared to take up the work of the major courses in chemistry, in which physical chemistry occupies such a prominent part. In the laboratory the minor class made a systematic study of the methods of preparation and the properties of the elements and compounds, and verified as far as possible the statements of fact made in the lecture room.

In the major course two lectures per week upon organic chemistry were given by Dr. Keiser throughout the year. The principles of classification, the properties and transformations of typical carbon compounds, were here discussed. Especial attention was given to the subject of chemical constitution, and in this connection the recent developments of the theory of valence and of stereochemistry were considered. In the laboratory work connected with this course typical organic compounds were prepared and a study was made of their more important transformations. Parallel with the course on organic chemistry there were given to the major students courses of lectures upon analytical and theoretical chemistry. The principles of qualitative and quantitative analysis formed the subject matter of the lectures delivered by Dr. Kohler upon analytical chemistry, and in connection with this course opportunity was given the students of acquiring practical experience in the operations and methods of analysis. Throughout the first semester of the major course two hours weekly were devoted to lectures by Dr. Kohler upon theoretical and physical chemistry. In these lectures a more thorough study of the principles of chemical theory was made than is possible in the first year, and the more important generalisations that have resulted from physico-chemical investigation were discussed. In the second semester one lecture a week on crystallography was given by Dr. Kohler, and for the purpose of illustrating the course one hundred glass and wooden crystal models were purchased. The acquisition of these models has greatly facilitated the work in crystallography, and has made the course more satisfactory to both instructor and students.

Biology.

The graduate students in physiology have attended lectures, the journal club and seminary, and have done special work under Dr. Joseph W. Warren. One student has continued her study of the existence of the amylolytic ferment in the salivary glands of various mammals, and this research has been brought to a conclusion so far as its original purpose goes. Another studied the variation of the white corpuscles of the blood under varying physiological conditions. There has been no opportunity as yet to work over her results in such a way as to judge the outcome. She also made a study of the kidney of *Menopoma allegheniense* (*vulgo* "Hellbender"), to see if it could be used for settling certain questions concerning the secretory action of that organ. Although the final results were negative, the investigation was well worth making, and the lack of success was altogether due to experimental difficulties, whose existence could not be clearly foreseen.

During a part of the year, the Fellow in Biology continued her work, which was interrupted last year. Besides attending the lectures, and participating in the exercises of the seminary and journal club, she was occupied with the question of stimulating sensory nerves, in order to determine their power of working without fatigue. These researches have not yet been brought to a final conclusion.

Post-major work was undertaken by three students. One student had a special and brief course in the elements of the graphic method during the second semester, the others doing full work for the entire year. Another studied the milk-curdling ferment of the stomach in various animals. She also began a special investigation of the influence of temperature on the excretion of carbon dioxide in the frog. This will probably need to be continued at some later time, since in spite of her industry and patient work the number of successful experiments is probably too small.

A third post-major student was also occupied in part with the study of the milk-curdling ferment. In addition to this she began an examination of the influence of locality upon the electrical stimulation of motor nerves. This was undertaken more for the purpose of familiarising her with the method than with the view of attaining any very definite conclusions. A large share of her time

was devoted to experiments on frog's muscles for the purpose of showing the relation of time and temperature to the process of rigor mortis. A considerable number of such observations were made, and it is hoped that when they are fully worked out the results will be of considerable value for publication, besides furnishing the basis for further investigations by other students.

The enthusiasm shown by this student in her work, and her careful attention to its details, together with the exceptional ability shown in grasping the problem involved, and in acquiring the technical skill for its solution, gives promise of unusual success should she choose to devote herself to biological research.

Dr. Warren's work in the minor year was attended by twenty-eight students. This class was decidedly above the average in the quality of their laboratory courses, and in promise of future attainments in the subject.

The number of major students at the beginning of the year was fifteen, but one of these left college immediately. Three others were obliged to withdraw, as the result of accidents or ill-health, at various times during the first half year. The remaining eleven have worked through the year in a faithful and careful manner, doing well, but not manifesting unusual brilliancy.

The general outfit of the physiological laboratory has been improved during the year. New wires have been laid for convenience in experimentation, and a permanent battery has been set up in the battery closet. Owing to the character of the work undertaken it has been necessary to use the morphology room, and should the number of advanced students remain as now, or increase, this room will have to be taken permanently for such work. Our instrumental equipment has been much improved by the purchase of various pieces of apparatus or appliances which was rendered possible by the fund granted the department of physiology last year for this purpose. Besides the ever-useful sheathed electrodes, bone forceps, special cannulas, and clamps, there may be enumerated as important additions of larger size and cost, a standard tuning fork (from Koenig's, in Paris), Pfeil's electric "signal," Anschütz's "schnellseher," Williams' heart apparatus for studying the action of the frog's heart, a compendious induction apparatus, and a very useful stand for holding recording levers and markers.

These articles have all been exceedingly useful for demonstration, or as aids to actual laboratory research.

Still more important, as an event of the year, is the acquisition of a skilled mechanic, whose aid this laboratory now shares with that of physics. It has thus been possible to construct several most useful appliances without which some of the best work of the year would have been quite impossible. The enumeration of the articles thus made is not easy. It includes a large variety of little things (carefully-fitted rods, clamps, etc.) which make but little show in a list, although of great practical value and requiring careful construction. Of the appliances which are large enough or complicated enough to be classed as pieces of apparatus, which Mr. Banner has made for us, may be noted : sets of levers for muscle work ; a short-shunting key ; a double switch ; a complicated pair of adjustable electrodes for stimulating nerves at fixed distances ; an acoustic interrupter, modified from the design of Bernstein ; a stand for revolving a recording drum by clock work once in one hour or once in twelve hours (modified from the Bowditch design for this purpose), and another by which the drum may be revolved once in one, two, three or four hours, or once in twelve, twenty-four, thirty-six, or forty-eight hours, at will. A number of other most useful articles for experimental work are now under construction in the workshop.

The deficiencies of our library still continue, and attention is called to the memorandum of last year on this subject. It may be added that Bryn Mawr will stand behind the best places for research work, even in this country, so long as these defects of our library are not corrected. All advanced work in physiology will be pursued here at a disadvantage so long as our supply of reference books, especially of sets of journals, continues to be incomplete.

On account of the nature of the report made by Dr. Ross Granville Harrison, the report is here printed in the first person as written. It is of special interest as representing an outside opinion of the equipment of the biological department, Dr. Harrison having accepted the post of lecturer in morphology for one year during Dr. Morgan's absence in Europe.

Dr. Ross Granville Harrison respectfully submits the following report:

One course of advanced lectures was offered to graduate students. This was intended to supplement the course delivered the previous year by Dr. Morgan on the embryology of vertebrates in which the early stages in development—gastrulation and formation of the germ layers—were taken up. After two introductory lectures by way of review on early stages, the differentiation of the various organ systems was discussed. The treatment was therefore more or less divided up into separate topics. The early differentiation of the mesoderm, including the development of the muscular system and the connective tissue was the first subject treated. After this two lectures were given on the excretory organs, followed by five lectures on the limbs. The course was concluded by eight lectures on the morphology of the head. It was not possible in the time at our disposal to take up the last-named subject from all sides. The time was devoted to the vertebrate theory of the skull (historical), the metamerism of the head, the new theories of the hypophysis, and the morphology of the branchial apparatus. No text-book was followed. The recent literature of the various subjects was discussed and copious references were given for further reading.

In the laboratory there were three students doing advanced work. One began, at my suggestion, a research on the development of the limbs of the amphibia. The work was carried on with the greatest industry and enthusiasm. In the spring the same student made a number of experiments on very young tadpoles, bearing on the solution of some of the problems in the development of the limbs of vertebrates. The results of these experiments will take some time to work out completely, but some important ones have already been obtained.

Another student continued her work on spermatogenesis in the amphibia. Still another was engaged in the study of the development of *hylodes*, a curious West Indian frog, which develops directly without the intervention of the tadpole stage. The life history of this creature will be an important contribution to the development of vertebrates.

On the assumption of my duties on Oct. 11th, I found the undergraduate classes already organised. In the minor course the lectures on general biology were begun by Dr. Randolph, and were

continued by myself from the second week in November until the Christmas recess. This course corresponded to course A of last year's report. Course B was omitted. The laboratory course, which corresponded closely to the lectures, was conducted by Dr. Randolph and myself, assisted by Miss Minor. In the second semester my work with the minor class began after the spring recess when a course of four weeks on the embryology of the frog and chick, was delivered. This course was likewise accompanied by laboratory work.

The major course was under the charge of Dr. Warren during the first semester. In the second semester, during the months of February, March, and April, I delivered a course of forty lectures on general zoölogy and theoretical biology. The former occupied something over six weeks of the time. Only the invertebrates, including, however, amphioxus, were studied. In theoretical biology seven lectures were given. The time was occupied chiefly with the consideration of the theories of heredity and the origin of species. Care was taken to avoid the speculative side as much as possible, the idea of the course being not so much to give an exhaustive account of biological theories as to stimulate the desire for further investigation.

The course in general zoölogy was accompanied by suitable laboratory work, in which examples of all the principal groups of invertebrates were dissected. The work was conducted by myself, with the aid of Dr. Randolph.

The minor course was attended by twenty-nine students; the major by twelve. The work of both classes was very creditable, that of the major class being especially good.

There were no post-major students in morphology during the year, and the courses usually given were omitted.

The laboratory is now well equipped with microscopes, microtomes, and other apparatus for general use in the graduate and undergraduate courses, but the need was often felt during the past year of a better instrument for the use of those doing special research work on the structure of the cell. For such work a microscope is required having more highly magnifying lenses than those attached to the instruments allotted to the students. This is, in my opinion, one of the laboratory's greatest needs, and one which ought to be filled as soon as possible.

The equipment for lecture-room demonstration is on the whole satisfactory. There is a very good collection for this purpose showing the external features of all the forms taken up in the lectures. There is, however, a lack of good dissections showing internal structure.

The collection of charts is good. There is a complete set of Leuckart's zoölogical charts, and in addition to these a large number of others for use in the courses on general biology. Many of these were made by Miss Garber, whose assistance to the laboratory is of inestimable value.

The material for study used by the students in the laboratory was good, especially in embryology. Owing to the industry and zeal of Dr. Randolph a very valuable and complete collection of serial sections and surface views of the chick has been brought together.

The additions to the library during the past year, I regret to say, were not so numerous as the department had wished. One reason for this is that the cost of the morphological journals is very great, owing to the large number of lithographic plates contained in them. The chief reason is, however, that two distinct sciences have to share the appropriation with one another. Morphology and physiology have developed quite independently of one another; their methods are entirely different, and they are pursued by entirely different sets of investigators, and, what is most pertinent to the present case, the results are published in separate journals. In consequence of this, biology has very many more journals than other sciences. I have made the above suggestions just as they occurred to me, who came to the laboratory as a stranger. I make them, however, only while feeling that the department on the whole deserves to be congratulated on account of its prosperous condition.

Dr. Harriet Randolph reports that she lectured in the minor biology from October 22d to November 9th, and again from January 3d to February 2d. She states that the year has been an exceptional one in regard to the supply of microscopic plants and animals for the laboratory work. They were obtained chiefly from the neighboring ponds, and were unusually fine, both as to the size and the abundance of the individuals.

Physical Education.

The work of the department began under the direction of Dr. Alice Bertha Foster on Wednesday, October 5th. Physical examinations of the students occupied the first month of the winter session, the physical exercise of the students being, as usual, during October, elective outdoor sports.

Two hundred and twenty-five measurements were taken, as follows:

First measurements.

Freshmen,	61
Sophomores,	1
Hearers,	1
Graduates,	18
Fellows,	2
Total,	<hr/> 83

Second measurements.

Sophomores,	67
Juniors,	36
Seniors,	35
Graduates,	2
Fellows,	1
Librarian,	1
Total of second measurements,	<hr/> 142
First measurements,	83
Autumn measurements,	<hr/> 225

Class work began November 1st.

The physical training offered included athletic games, which were directed and governed by the Students' Athletic Association, and gymnasium work under the supervision of the director.

The requirement for regular undergraduates has been, for each week, three periods of active exercise, selected by choice, indoors or out, and one period of class work in the gymnasium, which included exercises of general value, such as might advantageously be repeated by the students on other days, without direction.

Prescription cards were furnished all students, containing personal advice for individual work. This work was intended to correct deformities or excessive or deficient developments, to improve the carriage, etc., as needed by the individual case, and was based on data obtained by the examinations.

Two radical changes were made in the method of handling the data of the department. Cards were substituted for books on account of their greater convenience in filing personal histories, and results of examinations of vital organs, and in recording of work prescribed and later observations.

Anthropometric charts were introduced for the first time. Dr. Sargent's were selected as representing the largest number of observations. On these the freshmen's measurements were plotted, and each entering class will be supplied with these charts.

At the first meeting of the freshman class, the charts were distributed, and a lecture was given on the object, use, method of reading and personal significance. Great interest was manifested. The charts were then placed on file in the office, where they may be consulted from time to time by the students as well as the teachers.

The freshman type for this year was presented by means instead of by averages, as formerly, on account of the gain in accuracy, and the list of measures so obtained was plotted, giving the curve of the composite of the entering class of 1894.

For the three upper classes second measurements only were taken, consisting of the thirty items usually selected as the points where the most important changes occur. By aid of these alterations were made, if needed, in the prescription cards of previous years.

The class work given has been adapted to the commonest need of each class. Since not all preparatory schools have thorough physical training, it is usually necessary to give a large proportion of development and elementary coöperative work to entering classes. Therefore the free standing work of the Swedish system was used exclusively for the freshman class.

The sophomore work was of wider scope, and included use of light apparatus and a moderate amount of "heavy gymnastics."

The junior class average of physical ability proved medium, and the work given them was similar to that of the sophomore, but with advanced series of such exercises as had been given them in previous years, and with less heavy work. The exercise for both these classes was given a distinctly recreative character.

The senior class as a whole seemed to require the hygienic type of exercise with certain corrective work for carriage, and was therefore given Swedish free work.

The gymnasium has been improved during the year by the addition of a swimming pool, seventy-four by twenty feet, with a depth of three and one-half to seven and one-half feet. The control of the pool was put into the hands of the Athletic Association, and careful rules for health and safety were made and posted by them. An association of four students was authorised to give regular lessons in fancy swimming and diving, and a committee of fourteen fine swimmers, recommended by the director, were appointed to assist beginners. On two days each week the water was lowered to an absolutely safe depth for those learning to swim.

The pool was under the charge of the indoor manager of the Athletic Association, and the outdoor manager had supervision of the golf club, the autumn tennis tournament, the hare and hounds runs, and the basket ball. In addition to these, bicycling and skating were popular forms of out-door work.

The organisation of a fire brigade in each residence hall has been one work of the department. The brigades as organised numbered between twenty and thirty students in each hall, and the captains were elected by the brigade, the appointments to be confirmed by the President. When fully under way, these, too, were put wholly into the students' hands.

The closing drill in the gymnasium took place on April 4th. Three hundred invitations were issued, and nearly two hundred students appeared in the floor work. The exercises presented were representative, illustrating the class work of the year.

During April final measurements were taken as follows:

Freshmen	56
Sophomores	56
Juniors	33
Seniors	26
Graduates	6
Total	<hr/> 177

In May the usual spring series of basket-ball games occurred in this order, and closed the organised physical training of the year.

Freshmen *vs.* Juniors—Won by Juniors.

Freshmen *vs.* Juniors—Won by Freshmen.

Freshmen *vs.* Juniors—Won by Juniors.

Juniors *vs.* Sophomores—Won by Sophomores.

Juniors *vs.* Sophomores—Won by Sophomores.

Tabular Statement of the Courses of Instruction given in 1894-95.

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
SANSKRIT AND COMPARATIVE PHILOLOGY	<i>Graduate Classes</i>				
	Lectures on Comparative Philology	Dr. Hopkins	1	3	3
GREEK	Sanskrit	"	1	2	2
	Elementary Greek, Grammar, Xenophon's Anabasis, Books I.-II., Homer's Iliad, Books I.-II.	Dr. Smyth	5		11
	Homer's Odyssey, Selections from Books I.-XII, minor	R. G. Bury	2	10	9
	Lysias, minor	Dr. Hopkins	2	8	
	Plato, minor	"	2		9
	Greek Prose Composition, minor	"	1	8	9
	Lectures on the History of Greek Literature, Epic and Lyric, major	R. G. Bury	2	13	
	Lectures on History of Greek Literature, Drama and Prose, major	"	2		13
	Æschylus, major	Dr. Hopkins	3	11	
	Thucydides, major	"	3		12
	Pindar, post-major	"	1	6	
	Theocritus, post-major	"	1		3
	Sophocles, post-major	"	2	5	
	Aristotle, post-major	Dr. Smyth	2		5
	Plato, post-major	R. G. Bury	2		1
	New Testament Greek, post-major	Dr. Barton	2	2	2
	<i>Graduate Classes</i>				
LATIN	Thucydides and Attic Historians	Dr. Smyth	4	4	5
	Horace, minor	R. G. Bury	2	41	
	Horace and Vergil, minor	"	2		39
	Livy, minor	Dr. Lodge	2	44	
	Livy and Cicero, minor	"	2		43
	Latin Prose Composition, minor	"	1	44	41
	Lectures on the History of Latin Literature, major	R. G. Bury	2	26	19
	Tacitus, major	Dr. Lodge	3	20	
	Horace, Juvenal, Tibullus, Propertius, major	"	3		13
	Terence, post-major	"	2	12	
	Plautus, post-major	"	2		9
	Lucretius, post-major	R. G. Bury	2	6	
	Catullus, post-major	"	2		4
	Latin Prose Composition, post-major	"	1	6	5
	<i>Graduate Classes</i>				
ENGLISH	Roman Historiography, Seminary	Dr. Lodge	4	4	4
	Lectures on the History of English Literature from the time of Shakespeare to the time of Milton, inclusive, required	Dr. Thomas	3	147	
	Lectures on the History of English Literature from the Restoration, exclusive of Milton, to the present time, required	Dr. Thomas	3		154

*Tabular Statement of the Courses of Instruction given in 1894-95,
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
ENGLISH . . .	Essay Work, required, first year . .	Dr. Gwinn & A. Kirk	. 2 .	. 62 .	. 53 .
	Essay Work, required, second year .	Dr. Gwinn & F. Keys	. 2 .	. 51 .	. 51 .
	Bright's Introduction to Anglo-Saxon Grammar and Bright's Reader, minor	Dr. Bruce	. 3 .	. 5 .	
	Anglo-Saxon, Bright's Reader, and Beowulf, minor	"	. 3 .		. 5 .
	Middle English Grammar and Reading of Middle English Texts, minor	"	. 2 .	. 2 .	. 2 .
	English Poets of the Nineteenth Century, major	Dr. Thomas and P. Sheavyn	. 2 .	. 9 .	. 11 .
	English Essayists and Critics of the Nineteenth Century, major . .	Dr. Gwinn	. 3 .	. 12 .	. 10 .
	Parallel Course to Nineteenth Century Criticism, major	"	. 1 .	. 3 .	. 3 .
	<i>Graduate Classes</i>				
	English Drama	Dr. Thomas and P. Sheavyn.	. 2 .	. 4 .	. 5 .
	Anglo-Saxon, Elene	Dr. Bruce	. 2 .	. 2 .	
	Anglo-Saxon, Cædmonian Poems, Judith, etc.	"	. 2 .		. 2 .
	Anglo-Saxon, Exeter Book	"	. 2 .	. 5 .	. 5 .
	Anglo-Saxon Phonology	"	. 2 .	. 2 .	. 2 .
	Elementary German Grammar and Translation	R. Chamberlin	. 5 .	. 14 .	. 11 .
GERMAN . . .	Lectures on the History of German Literature from Klopstock to the present time, minor	Dr. Collitz	. 2 .	. 20 .	. 17 .
	German Reading, Wallenstein, minor	R. Chamberlin	. 2 .	. 21 .	
	German Reading, Faust, Pt I., minor	"	. 2 .		. 24 .
	German Prose Composition, minor	"	. 1 .	. 16 .	. 16 .
	German Conversation, minor and major	"	. 1 .	. 20 .	. 20 .
	Lectures on the History of German Literature from the earliest times to the time of Klopstock, exclusive, major	Dr. Collitz	. 3 .	. 8 .	. 8 .
	German Reading, Faust, Part II., major	R. Chamberlin	. 1 .	. 10 .	
	German Reading, Goethe-Schiller Correspondence, major	"	. 1 .		. 11 .
	German Prose Composition, major	"	. 1 .	. 9 .	. 12 .
	Middle High German, post-major .	"	. 1 .	. 1 .	
	Old High German and German Dialects, post-major	"	. 1 .		. 1 .
	Modern German Reading, post-major	"	. 2 .		. 1 .
	Gothic, post-major	Dr. Collitz	. 1 .	. 1 .	. 1 .
TEUTONIC PHILOLOGY .					

*Tabular Statement of the Courses of Instruction given in 1894-95,
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
TEUTONIC PHILOLOGY	<i>Graduate Classes</i>				
	Gothic	Dr. Collitz	1	1	2
	Old High German	"	1	1	1
	Old Saxon	"	1	2	2
	Old Norse	"	1	2	2
	Introductory Teutonic Philology .	"	1	2	2
FRENCH	Comparative Teutonic Philology .	"	1	2	3
	Elementary French, Grammar and Translation	T. F. Colin	5	6	6
	Lectures on the History of French Literature of the Eighteenth and Nineteenth Centuries, minor .	Dr. Fontaine	2	25	34
	French Critical Reading, minor .	T. F. Colin.	1	30	28
	French Prose Composition, minor .	"	1	27	23
	French Reading and Conversation, minor	"	1	31	29
	Lectures on French Literature of the Seventeenth, Eighteenth, and Nineteenth Centuries, major .	Dr. Fontaine	2	14	15
	French Critical Reading, major .	"	1	13	10
	French Prose Composition, major .	"	1	14	11
	French Conversation, major . .	"	1	21	14
	Old French Reading, post-major .	"	1	4	4
	<i>Graduate Classes</i>				
	French Philology and Literature, Old French Epic Poetry, Old French Syntax	"	3	2	2
	French Drama, Old French Texts, Versification and Metrics .	"	2	1	1
	Italian Grammar, Composition and Critical Reading, minor	F. M. Page	3	5	2
	Italian Grammar, Composition and Critical Reading, minor	"	3		
	Italian Literature, Grammar, Composition, and Critical Reading, major	"	3	3	3
SPANISH	Spanish Grammar, Composition and Critical Reading, minor	"	2	6	6
	Spanish Literature, Grammar, Composition and Critical Reading, major	"	2	1	1
	<i>Graduate Classes</i>				
	Spanish Syntax, Composition and Literature, Origin of Spanish Drama and Dramatists, Dramas of the Sixteenth and Seventeenth Centuries	"	2	1	1
SEMITIC LANGUAGES AND BIBLICAL LITERATURE	Elementary Hebrew	Dr. Barton	2	1	1
	Advanced Hebrew	"	3	2	

*Tabular Statement of the Courses of Instruction given in 1894-95,
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
SEMITIC LAN- GUAGES AND BIBLICAL LITERATURE	Old Testament Seminary	Dr. Barton	. 1	. 1	. 1
	Assyrian	"	. 1		. 1
	The History of Israel	"	. 2	. 2	. 1
	The Cuneiform Inscriptions and the Old Testament	"	. 1	. 3	. 3
	Patristic Greek	"	*2	. 1	
	Patristic Greek	"	†1		. 1
	Historical Outlines of Christian Thought	"	. 1	. 6	. 8
	New Testament Seminary	"	. 1	. 1	. 1
	Modern History, from the Treaty of Westphalia to the close of the Napoleonic Campaigns, minor . .	Dr. Andrews	. 5	. 74	
	Modern History, from the Congress of Vienna to the present time, minor 5		. 80
HISTORY . . .	English Constitutional History, post-major	"	. 2	. 5	. 4
	<i>Graduate Classes</i>				
	Historical Definition, Method and Criticism	"	. 2	. 3	. 3
	History of the Roman Law	"	. 1	. 3	. 3
	Principles of Economics, minor .	Dr. Keasbey	. 5	. 26	
	Economic Geography and Demogra- phy, minor	"	. 5		. 26
	The History of Labor and Capital, major	"	. 5	. 22	. 21
	Logic and Psychology, required .	Dr. Miller	. 3	. 33	
	Psychology and Philosophy, re- quired	"	. 3		. 36
	Lectures on Christian Ethics, re- quired	Dr. Rhoads	. 2	. 39	
POLITICAL SCIENCE . .	Lectures on the Origin and Contents of the Books of the Bible, required	Dr. Barton	. 2		. 39
	Psychology, minor	Dr. Miller	. 3	. 10	. 6
	British Philosophy of the Seven- teenth and Eighteenth Centuries, minor	"	. 2	. 8	. 8
	Ethics, free elective	"	. 2		. 3
	Trigonometry, required	J. Harkness	. 3	. 15	
	Solid Geometry, required	Dr. Scott	. 2		. 9
	Analytical Conics, minor	"	. 5	. 11	
	Algebra, Advanced Trigonometry, and Theory of Equations, and Ele- mentary Differential and Integral Calculus, minor	J. Harkness	. 5		. 7
	Differential and Integral Calculus, Differential Equations, major . .	"	. 5	. 5	
	Curve Tracing, Analytical Geometry of Three Dimensions, major . .	Dr. Scott	. 4		. 4
PHILOSOPHY .					
MATHEMATICS					

* First half of first semester.

† Second half of first semester, and second semester.

*Tabular Statement of the Courses of Instruction given in 1894-95,
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
MATHEMATICS	History of Mathematics, major . .	Dr. Scott	1		4
	Modern Analytical Geometry, post- major	"	2	4	3
	Elements of the Theory of Func- tions, post-major	J. Harkness	2	3	2
	<i>Graduate Classes</i>				
	Individual Seminary Work	Dr. Scott	4	3	
	Individual Seminary Work	"	3		2
	Theory of Groups	J. Harkness	2	2	1
PHYSICS . . .	Laws and Properties of Matter, Heat, Mechanics, minor	Drs. Mackenzie and Buckingham	5	11	
	Electricity and Magnetism, Light and Sound, minor	"	5		10
	Laboratory Work, minor	"	4	11	10
	Theory of Electricity, Problems in Mechanics, major	"	5	3	
	Theory of Heat, Theory of Light, Theory of Sound, major	"	5		3
	Laboratory Work, major	"	5	3	3
	Theory of Electricity and Magne- tism, post-major	Dr. Mackenzie	2	1	3
	Laboratory Work, post-major . . .	"	5	1	3
	<i>Graduate Classes</i>				
	Physical Optics	"	3	3	2
	Thermodynamics	Dr. Buckingham	1	3	
CHEMISTRY . .	Introduction to General Chemistry (Lectures), minor	Dr. Keiser	3	48	
	General Chemistry (Lectures), minor Reviews and Chemical Physics, minor	"	3		50
	Laboratory Work, minor	Dr. Kohler	2	48	50
	Lectures on Organic Chemistry, major	Drs. Keiser and Kohler	5½	48	50
	Lectures on Theoretical Chemistry, major	Dr. Keiser	2	14	12
	Lectures on Inorganic Chemistry, major	Dr. Kohler	1	12	
	Lectures on Inorganic Chemistry and Quantitative Analysis, major Laboratory Work, major	"	2	12	
	Advanced Organic Chemistry, post- major and graduate	"	3		12
	Theoretical and Physical Chemistry, post-major and graduate	Drs. Keiser and Kohler	5½	12	12
	Laboratory Work, post-major and graduate	Dr. Kohler	1	3	3
	Seminary Work	Dr. Keiser	2	6	6
BIOLOGY . . .	Lectures on General Biology, minor	Drs. Keiser and Kohler	1	6	6
	Lectures on Plants, Vertebrates and Embryology, minor	Drs. Harrison and Randolph	5	30	
			5		28

*Tabular Statement of the Courses of Instruction given in 1894-95,
continued.*

DEPARTMENT	COURSE	INSTRUCTOR	HOURS WEEKLY	NO. IN CLASS	
				1ST SEM.	2ND SEM.
BIOLOGY . . .	Laboratory Work, minor	Drs. Harrison and Randolph	5½ .	30 .	28 .
	Animal Physiology, major	Dr. Warren	5 .	15 .	
	Laboratory Work, major	"	5½ .	15 .	
	General Zoölogy, Theoretical Biol- ogy, major	Drs. Warren and Harrison	5 .		12 .
	Laboratory Work, major	"	5½ .		12 .
	Lectures on the Central Nervous System, post-major	Dr. Warren	1 .	2 .	2 .
	Laboratory Work, post-major	"		2 .	2 .
	<i>Graduate Classes</i>				
	Advanced Biology	Dr. Harrison	1 .	4 .	4 .
	Physiology	Dr. Warren	1 .	3 .	3 .
	Physiological Laboratory Work	"		3 .	3 .
	Journal Club	Drs. Warren, Har- rison and Ran- dolph	1 hour frtightly	3 .	3 .
	Seminary Work	"	1 hour frtightly	3 .	3 .

Report of the Librarian.

To the President :

THE additions to the library during the year have been one thousand three hundred and ninety volumes from the regular library sources. In addition, six thousand four hundred and eighty-three volumes of the Sauppe collection, given by Miss Mary E. Garrett, of Baltimore, in 1894, have been catalogued and placed upon the shelves, making the total number of volumes in the library twenty-one thousand four hundred and fifty-seven. The duplicate volumes of the Sauppe collection have been sold for the sum of nine hundred dollars, and this amount has, by the generosity of the donor, been added to the library resources for the purchase of books. One hundred and sixty-four periodicals are taken by the library. Again an earnest plea for a separate library building is made. Much inconvenience has been caused during the year by the necessity of placing books in the class rooms, the shelving space in the library being insufficient. The floor space for readers has been wholly inadequate. The unavoidable noise of the coming and going of students in the limited room that our present quarters offer has been a serious interference to work, and makes doubly difficult the work of the librarian. A separate library building is urgently needed.

The library is open daily from 8 a.m. to 10 p.m. The following gifts have been received by the Library during the year, and are herewith gratefully acknowledged :

American Swedenborg Printing and Publishing Company :
Swedenborg's Works, 23 volumes.

Anonymous : Facsimile of E. B. Browning's last poem, "The North and the South ;" " Historic Churches of America."

Mr. Thomas Balch : " French in America," given by the author.

Miss Cora A. Benneson : " Journal of American Folk Lore,"
1892, 1893, 1894, 3 volumes ; and subscription for 1895.

Mr. H. B. Carrington : " Beacon Lights of Patriotism," given
by the author.

Mr. Howard Comfort: Wagstaff, "History of Friends;" Memorials of Admiral Penn; Sturges' Memoirs; Penn's Works, first royal folio edition; Mrs. Hemans' Poetical Works, 6 volumes; Memoirs of Whitehead, 2 volumes; Tukes, "Principles of Quakers;" Lyell, "Geology," 2 volumes; Fox's Journal; Bates, "Doctrines of Friends;" Barclay's Works; Gurney's Memoirs; "Life of Mary Dudley;" Bickley, "George Fox;" Bayly's Works; Collection of Testimonies; Churchman's Journal; Bibliotheca Antiquakeriana; Shackleton's Memoirs; Kelty, "Primitive Quakers;" Whiting's Memoirs; "Personal Memoirs of U. S. Grant," 2 volumes.

Mr. Francis R. Cope: Toy, "Religions of Israel;" "Ante-Nicene Library of the Fathers," 11 volumes; Harper, "Assyrian Letters;" Bacon, "Exodus;" Crutwell, "History of Latin Christianity;" Harmack, "Gesch. d. Althristlichen Literatur," volume 1; Tischendorf, "Novum Testamentum Græce," volumes 2 and 3; Weiss, "Einleitung in d. neue Testament."

Miss Sarah Eddy: Salt, "Animals' Rights."

Mr. G. W. Egleston: Thomas Egleston, "Life of John Paterson."

Miss Mary E. Garrett: Gray, "Absolute Measurements in Electricity;" Preston, "Theory of Heat;" Thomson, "Recent Advances in Electricity," "Applications of Dynamics to Physics and Chemistry;" Bassett, "Physical Optics;" Thomson and Tait, "Elements of Natural Philosophy," "Treatise on Natural Philosophy;" Watts, "Index of Spectra and Appendices;" Mascart, "Optique;" Poincaré, "Théorie mathématique de la lumière," "L'électricité et optique;" Duhem, "Mécanique chimique;" Lippmann, "Thermodynamique;" Lorenz, "Die Lehre vom Licht;" Ostwald, "Outlines of General Chemistry," "Solutions;" Peddie, "Manual of Physics;" Carhart, "Primary Batteries;" Glazebrook, "Properties of Matter;" Scheiner, "Astronomical Spectroscopy;" Jones, "Electric Waves;" Gänge, "Anleitung zu Spectralanalyse;" Lang, "Anleitung in d. theoret. Physik."

Dr. Mary M. Gwinn: Arnold, "Discourses in America," 2 volumes; "Mixed Essays," 4 volumes.

The Howard Association: Render, "Through Prison Bars."

Miss Charlotte F. McLean : Allen, "Physiological Æsthetics."

Miss Anna Rhoads : Princeton Review, 1878-1883 ; New Princeton Review, 1886-1887.

The late Dr. James E. Rhoads : Stone, "Birds of Eastern Pennsylvania and New Jersey."

Miss E. Rogers : Rogers, "Emendations in Æschylus."

Dr. Charlotte Angas Scott : "Plane Cubics," "Modern Ideas and Methods in Plane Analytical Geometry," given by the author.

President M. Carey Thomas : Cornell Studies in Classical Philology, No. 3 ; Goldsmith, "Deserted Village ;" Shakespeare, "Merchant of Venice," ed. by Bates.

University of Vermont : Marsh Library Catalogue.

Mr. Horace G. Wadlin : Massachusetts Bureau of Labor Statistics Publications.

Dr. James W. Warren : Dalton, "Experimental Method in Medical Science."

In addition the Library received many publications of the United States Government and many State publications, as well as many books from various publishing houses, some of which are here enumerated : Baker, "Short Courses in Chemistry," "Natural Philosophy ;" Bradley and Eaton, "Practical Arithmetic ;" Gillet and Rolfe, "Natural Philosophy ;" Greenleaf, "Complete Arithmetic ;" Keetels, "Analytical French Reader ;" Kiddle, "Text-Book of Physics ;" MacGregor, "Kinematics and Dynamics ;" May, "Anatomy ;" Nobile, "An Anonymous Letter," from the Italian ; Olney, "Complete Algebra," "University Algebra ;" Robinson, "Elementary Algebra," "University Algebra ;" Roscoe, "Elementary Chemistry ;" Sauveur, "L'enseignement des langues vivantes," "Fables de la Fontaine," "Contes merveilleux," "Petite Grammaire Francaise," "Talks with Caesar ;" Scudder, "History of the United States ;" Stewart, "Elementary Physics ;" Wentworth, "Elements of Algebra," "Elements of Plane and Solid Geometry ;" Worman, "First French Book," "L'écho de Paris," "Questionnaire," "Erstes deutsches buch," "Zweites deutsches buch ;" Worman and Rougement, "Teachers' Handbook and Grammaire Francaise."

Respectfully submitted,

FLORENCE E. PEIRCE, *Librarian.*

Fellowships and Scholarships Conferred for the Year 1895-96.

- FLORENCE LEFTWICH, *Bryn Mawr European Fellow.*
Baltimore, Md. Wellesley College, 1884-85; A.B., Bryn Mawr College, 1895. Student in Romance Languages, Sorbonne and Collège de France, 1895-96.
- EDITH HAMILTON, *Mary E. Garrett European Fellow.*
Fort Wayne, Ind. A.B. and A.M., Bryn Mawr College, 1894. Fellow in Latin, Bryn Mawr College, 1894-95; Student in Greek and Latin, University of Leipsic, 1895-96.
- ELEANOR PURDIE, *Fellow in Greek.*
London, England. Newnham College, University of Cambridge, England, 1890-94; Classical Tripos, Part I, First Class, 1893; Part II, 1894. Holder of the Marion Kennedy Studentship, and Student in Indo-European Philology, University of Freiburg, 1894-95.
- JENNETTE ATWATER STREET, *Fellow in Latin.*
Toronto, Canada. A.B., University of Toronto, 1895.
- PHOEBE A. B. SHEAVYN, *Fellow in English.*
Atherstone, England. Scholar, University College of Wales, Aberystwith, Wales, 1887-89 and 1892-94; A.B., University of London, 1889, and A.M., 1894. Member of Governing Court of University of Wales, 1894; Reader in English, Bryn Mawr College, 1894-95.
- MINNA STEELE SMITH, *Fellow in German and Teutonic Philology.*
Edinburgh, Scotland. Newnham College, University of Cambridge, England, 1890-94; Medieval and Modern Language Tripos, University of Cambridge, First Class, 1893. Fellow in German and Teutonic Philology, Bryn Mawr College, 1894-95.
- ANNA LEWIS COLE, *Fellow in Romance Languages.*
Baltimore, Md. A.B., Woman's College of Baltimore, 1892, and A.M., 1894. Student in English and French, Sorbonne, 1894-95.
- ELEANOR LOUISA LORD, *Fellow in History.*
Malden, Mass. A.B., Smith College, 1887, and A.M., 1890. Fellow in History, Bryn Mawr College, 1889-90; Instructor in History, Smith College, 1890-94; Student in History, Newnham College, University of Cambridge, England, 1894-95.
- EMILIE NORTON MARTIN, *Fellow in Mathematics.*
Ardmore, Pa. A.B., Bryn Mawr College, 1894. Graduate Student in Mathematics, Bryn Mawr College, First Semester, 1894-95; Teacher of Latin in the Bryn Mawr School, Baltimore, Md., January-June, 1895.
- MARY PETTY, *Fellow in Chemistry.*
Greensboro, N. C. S.B., Wellesley College, 1885. Teacher of Latin, Guilford College, 1888-93; Teacher of Chemistry and Physics, State Normal School, Greensboro, 1893-95.
- CLARA LANGENBECK, *Fellow in Biology.*
Cincinnati, O. Ph.G., Cincinnati College of Pharmacy, 1890; S.B., University of Cincinnati, 1895.
- EVANGELINE ST. CLAIR CHAMPLIN, *Graduate Scholar in English.*
Alfred, N. Y. L.B., Alfred University, 1887, and Lit. M., 1888. Graduate Student in English, Bryn Mawr College, 1891-92.
- JESSIE DARLING, *Graduate Scholar in French and Italian.*
Toronto, Canada. A.B., University of Toronto, 1895.
- LUCY FRANCISCO, *Earlham Graduate Scholar in Mathematics and Chemistry.*
Richmond, Ind. S.B., Earlham College, 1895.
- FANNY COOK GATES, *Graduate Scholar in Mathematics.*
Waterloo, Ia. L.B., Northwestern University, 1894, and L.M., 1895. Fellow in Mathematics, Northwestern University, 1894-95.

HENRYANNA CLAY HACKNEY, *Guilford Graduate Scholar in Greek and English.*

Guilford College, N. C. A.B., Guilford College, 1895.

EMILY BEVAN HARRINGTON, *Graduate Scholar in English.*
Halifax, N. S. A.B., Dalhousie College and University, 1892, and A.M., 1894.

HARRIET FRAZIER HEAD, *Graduate Scholar in Biology.*
Philadelphia, Pa. A.B., Bryn Mawr College, 1891. Teacher of Latin in Mrs. E. L. Head's School, Germantown, Philadelphia, 1891-94.

HELEN DEAN KING, *Graduate Scholar in Biology.*
Owego, N. Y. A.B., Vassar College, 1892. Graduate Student in Biology, Vassar College, and Assistant in the Biological Laboratory, 1894-95.

DOROTHY WILBERFORCE LYON, . . *Graduate Scholar in Teutonic Philology.*
Elizabeth, N. J. A.B., Wells College, 1887. Graduate Student in English, Bryn Mawr College, 1887-89, and First Semester, 1892-93, and Graduate Scholar in English, 1893-94; Head Teacher of English, and Teacher of History, at the Randolph-Harrison School, Baltimore, Md., 1894-95.

ELLA R. NAYLOR, *Penn Graduate Scholar in Biology.*
New Sharon, Ia. S.B., Penn College, 1895.

FLORENCE PEEBLES, *Graduate Scholar in Biology.*
Lutherville, Md. A.B., Woman's College of Baltimore, 1895.

INEZ L. RIGGS, . . . *Graduate Scholar in German and Teutonic Philology.*
Columbia, Mo. L.B., University of the State of Missouri, 1894, and L.M., 1895.

CAROLINE TAYLOR STEWART, . . . *Graduate Scholar in German and French.*
Neguinee, Mich. A.B., University of Kansas, 1891; A.M., University of Michigan, 1895.

EMMA STANSBURY WINES, *Graduate Scholar in Philosophy.*
Springfield, Ill. Wellesley College, 1889-90; A.B., Bryn Mawr College, and George W. Childs Prize Essayist, 1894. Teacher of English and History in the Walton School, Philadelphia, 1894-95.

LYDIA MITCHELL ALBERTSON, *Foundation Scholar.*
Philadelphia, Pa. Prepared by the Friends' Select School, Philadelphia. Foundation Scholar, Bryn Mawr College, 1893-95.

GERTRUDE ORREN HUNNICUTT, *Foundation Scholar.*
Lawrence, Kan. A.B., University of Kansas, 1889. Graduate Student in Greek and French, University of Kansas, 1889-90; Assistant in the Newberry Library, Chicago, Ill., 1892-93; Graduate student in German and Political Science, Bryn Mawr College, Second Semester, 1894-95; Foundation Scholar, Bryn Mawr College, 1894-95.

EVELYN HUNT, *Anna Powers Memorial Scholar.*
Philadelphia, Pa. Prepared by the Friends' Central School, Philadelphia.

ALICE ANN MENDENHALL, *Foundation Scholar.*
Bloomington, Ind. A.B., Earlham College, 1890. Teacher of Latin and Mathematics in the Bloomington Academy, 1890-94; Graduate Student in Semitic Languages and New Testament Greek, University of Chicago, 1894-95.

ALICE J. VAIL, *Foundation Scholar.*
Pasadena, Cal. Prepared by Westtown Boarding School. Foundation Scholar, Bryn Mawr College, 1894-95.

HETTIE EVANS WILLITS, *Foundation Scholar.*
Haddonfield, N.J. Prepared by Westtown Boarding School. Foundation Scholar, Bryn Mawr College, 1894-95.

Degrees Conferred During the Academic Year 1894-95.

Doctor of Philosophy.

MARTHA BUNTING, of Philadelphia.

B.L., Swarthmore College, 1882; University of Pennsylvania, 1888-91: Graduate Student in Biology, Bryn Mawr College, 1891-93; Assistant in Biology, Woman's College, Baltimore, 1893-95. Subjects: Morphology and Physiology. Thesis: The Origin of the Sex-Cells in Hydractinia and Podocoryne and The Development of Hydractinia.

Master of Arts.

MARY BIDWELL BREED, of Pittsburg.

A.B., Bryn Mawr College, 1894; Holder of the Bryn Mawr European Fellowship, 1894-95; Graduate Student in Chemistry, Bryn Mawr College, 1894-95. Chief Subject: Chemistry.

Bachelor of Arts.

HELEN MIDDLETON, of Pennsylvania.

Prepared by Mrs. E. L. Head's School, Germantown, Philadelphia. Group: History and Political Science. The work for this degree was completed in February, 1895.

MARY JANNEY ATKINSON, of Pennsylvania.

Wellesley College, 1888-90. Group: Chemistry and Biology.

ELIZABETH CONWAY BENT, of Harrisburg.

Prepared by Mlle. de Bonneville's School, Philadelphia. Group: Greek and Latin.

ANNE CAROLINE COLEMAN, of Philadelphia.

Prepared by Miss Irwin's School, Philadelphia, and by private study. Group: Chemistry and Biology.

MARY FRENCH ELLIS, of Philadelphia.

Prepared by Miss Boyer's School, Philadelphia. Group: Chemistry and Biology.

MARY FLEXNER, of Kentucky.

Prepared by the Girls' High School, Louisville, and by private study. Group: History and Political Science.

SUSAN FOWLER, of Baltimore.

Prepared by St. Timothy's School, Catonsville, Md. Group: Greek and Latin.

ROSALIE ALLAN FURMAN, of Indiana.

Prepared by the Evansville High School, and by private study. Group: Chemistry and Biology.

ANNETTE LOUISE HALL, of Philadelphia.

Prepared by the Friends' Central School, Philadelphia, and by private study. Group: Greek and Latin.

MADELINE VAUGHAN HARRIS, of Philadelphia.

Prepared by Mrs. E. L. Head's School, Germantown. Group: Latin and German.

MARY HARRIS, of Philadelphia.

Prepared by Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: Mathematics and Physics.

MARY DENVER JAMES, of Ohio.

Philosophical Course, Wooster University, 1890-91. Group: Latin and French.

MARIANNA JANNEY, of Philadelphia.

Prepared by the Friends' Central School, Philadelphia, and by Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: Latin and German.

MARY JEFFERS, of Pennsylvania.

Classical Course, Wellesley College, 1885-86. Teacher of Latin and Greek, York Collegiate Institute, York, Pa., 1893-95. Group: Greek and Latin.

MARTHA DIVEN LAPORTE, of Pennsylvania.

Prepared by the Mountain Seminary, Birmingham, Pa. Group: Greek and Latin.

FLORENCE LEFTWICH, of Baltimore.

Wellesley College, 1884-85. Group: Latin and French.

JESSIE LIVINGSTON LOUDERBACK, of New York City.

Prepared by Miss Jaudon's School, New York City. Group: History and Political Science.

ZELINDA NEVILLE, of Kentucky.

Prepared by private study and Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: Greek and Latin.

EDITH PETTIT, of Philadelphia.

Prepared by Miss Irwin's School, Philadelphia. Group: Latin and English.

MARGARET HILLES SHEARMAN, of Wilmington.

Prepared by the Misses Hebb, Wilmington, and by Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: History and Political Science.

HARRIET RIDGWAY SHREVE, of New Jersey.

Prepared by Miss Pomeroy and Mrs. Sudler, Plainfield, and by private study. Group: Latin and Mathematics.

BERTHA SZOLD, of Baltimore.

Prepared by the Misses Adams's School, Baltimore. Group: Latin and English.

LYDIA LOIS TILLEY, of Virginia.

Norfolk Country, Va. Prepared by the Hemenway High School, and by private study. Group: Mathematics and Physics.

ANN MARTHA WALKER, of Pennsylvania.

Prepared by Darlington Seminary, West Chester, Pa., and by Miss Mary E. Stevens's School, Germantown, Philadelphia. Group: Greek and Latin.

MARGARET WARNER, of Connecticut.

Prepared by the High School, Hartford. Group: History and Political Science.

A Tabular Statement of the Increase in the Number of Students and of the Degrees Conferred during the Ten Years from 1885 to 1895.

	Graduate Students.	Under-graduates.	Total number.	A.B.	A.M.	Ph.D.
1885-86,	8	36	44			
1886-87,	10	54	64			
1887-88,	8	70	78	1		1
1888-89,	16	100	116	24		
1889-90,	22	100	122	15	1	
1890-91,	12	120	132	11	1	1
1891-92,	27	142	169	16	1	1
1892-93,	34	168	202	29	1	1
1893-94,	43	200	243	22	9	1
1894-95,	49	234	283	26	1	1

Tabular Statement of the Distribution of Students in the various Departments of Study during the ten years from 1885 to 1895.

	Sanskrit and Comparative Philology.	Greek.	Latin.	English Literature.	Anglo-Saxon.	German.	Teutonic Philology.	French.	Romance Philology.	Italian.	Spanish.	Semitic Languages and Biblical Literature.	History.	Political Science.	Philosophy.	History of Art.	Mathematics.	Physics.	Chemistry.	Biology.
1885-86,		30	18	32		7		10	1	2			8				32		10	10
1886-87,	1	20	24	39		17	1	3	2		2		15		19		29		6	22
1887-88,	1	28	36	39	3	42	4	25	2	2	4			13	45		12	11	16	25
1888-89,	2	40	35	67	7	50	4	26					63	17	16		23	10	10	27
1889-90,	6	46	58	76	9	44	4	21		1	1		34	24	20		28	7	11	26
1890-91,	1	42	59	86	6	46	3	23		4	1		54	30	16		35	6	24	26
1891-92,	2	36	75	92	8	46	1	28	1	5	1		46	40	28	12	24	7	31	42
1892-93,	4	38	45	135	10	60	2	30	1	8	4	4	57	54	28	19	27	27	45	42
1893-94,	4	44	80	156	15	71	3	50	1	10	5	7	53	70	52		32	20	45	47
1894-95,	5	51	91	170	10	75	6	83	5	8	9	12	86	53	57		34	20	71	53

Gifts Received by the College during the Year 1895-96.

The following gifts have been received during the past year in addition to the gifts of special books to the library, which are enumerated and acknowledged in the report of the librarian. The sincere gratitude of the College is due to the liberal donors who have so greatly increased its facilities for usefulness.

From Justus C. Strawbridge:

A bronze bust of the late Dr. James E. Rhoads, larger than life, executed by the sculptor, Mr. John Boyle, of Philadelphia.

A Numidian marble bracket and niche for the bust.

The sum of \$244.50 to be expended on grading newly acquired property.

From Miss Ethel Powers :

The Anna Powers Memorial Scholarship of \$200.

Contributions to the Swimming Tank as follows:

From the Treasurer of the Alumnae Association of Bryn Mawr College, amount raised by the alumnae, students and others, \$1,757.49

From Miss Mary E. Garrett, 1,500.00

From anonymous contributors, 12.50

NOTE.—The total cost of the Swimming Tank was \$3,553.17, leaving the sum of \$284.85 to be paid out of the funds of the College.

From Miss Mary E. Garrett :

Kennedy Lot, Ground Rent, \$2,269.74

Mary E. Garrett Scholarships, 1,400.00

Mary E. Garrett European Fellowship, 500.00

Expenses of Sauppe Library, 1,596.28

Special Fund of \$1,000 for apparatus and books, 1,000.00

A fund of \$1,300 for the equipment of the Art Department, including photograph cases, to be expended in 1895-96.

From a friend of the College :

A graduate scholarship of \$100.

From Dr. Hermann Collitz :

A framed photograph of Professor Sauppe, to be hung in the Library.

From the Undergraduate Association of Bryn Mawr College :

A Memorial Fund of \$350 raised in honor of the late Dr. James E. Rhoads, for the purchase of books on art, under the direction of the head of the Department of Art and Archæology.

From His Majesty the King of Siam :

“The Tripitaka,” a Siamese edition of the sacred writings of the Southern Buddhists, in thirty-eight volumes.

Gifts of money, amounting in all to over four thousand dollars, were received from friends, who requested that their names should not be mentioned, for special objects enumerated below :

Printing of Alumnae Health Statistics ; Professor Sauppe’s Bust in Plaster ; Purchase of Caps and Gowns to be rented to students at Conferring of Degrees ; Graduate Club Room ; Board walks in College Grounds ; College contribution toward Merion Avenue ; Changing grade at Pembroke Entrance ; Workshop ; Express Wagon ; Scales ; Fire Equipment ; Lightning Rods ; Salary of Physical Instrument Maker ; Cost of Memorial Services ; New Steam Pump in Boiler House.

Addresses Delivered in the Year 1894-95.

Before the College:

- MR. THOMAS COCHRAN, "Football at Yale."
LADY HENRY SOMERSET, "Franchise of Women."
MRS. ALICE FREEMAN PALMER, "Progress in Women's Education."
DR. HENRY HARTSHORNE, "Japan before the War."

Before the Graduate Club:

- MR. JOHN FOSTER KIRK, "A Study from Macbeth."
DR. Y. J. FINDLAY, "Pedagogy and the High Training of Teachers."
MRS. RHYS-DAVIS, "Women in Buddhism."
MRS. CHRISTINE LADD FRANKLIN, "The Retina of the Eye."
DR. DICKINSON SERGEANT MILLER, "Mr. Balfour's 'Foundations of Belief.'"

Before the Philosophical Club:

- PROFESSOR WILLIAM PALMER, "Ethics and the Law."
PROFESSOR JOSIAH ROYCE, "Some Anomalies of Self-Consciousness."
PROFESSOR FULLERTON, "The Educational Value of Moral Studies."

Before the De Rebus Club:

- MR. CHARLES DUDLEY WARNER, "American Literature."
MR. CHARLES COPELAND, "Hamlet on the Stage."
MR. HERAUT OL. KIRETCHGIAN, "The Situation in Armenia."
MR. WILLIAM M. SALTER, "The Late Pullman Chicago Strike."
MR. HERBERT WELSH, "The New Reform and our Duty toward it."

Before the College Settlement Association:

- DR. JANE ROBBINS, "The Work of the New York Settlement."
MR. HARRY LLOYD, "Trades Unions and Strikes."

Before the Christian Union:

- MRS. BALLINGTON BOOTH, "The Aims and Work of the Salvation Army."
REV. MR. ROBERT ELLIOT SPEER, "A Study of the Character of Christ."
(Eight Lectures.)
REV. DR. JOHN HALL, of New York, "Saving Faith," Hebrews X: 39.
REV. DR. GEORGE S. RAINSFORD, John V: 2-9.
MISS BIDDLE and MRS. BLAIR, "The Work of the Church Training and Deaconess' House, Philadelphia."

Before the Temperance Association:

- MRS. BARNES and MISS CUMMINGS, "The Huguenot Seminary, Natal, South Africa."

Before the Missionary Association:

REV. MR. ROBERT ELLIOT SPEER, "Foreign Missions."

MR. LUTHER D. WISHARD, Foreign Secretary of the Young Men's Christian Association, "Christian Work of Men and Women in the Colleges of China, Japan and India."

MR. H. W. LUCE, Travelling Secretary of the Student Volunteer Movement, "The Formation and Work of the Student Volunteer Movement."

MISS E. P. COBB, "Christian Living, Especially in its Relation to Missionary Life."

DR. JESSICA R. CARLETON, of India, "Medical Missions in India, and the Need of College Women."

*Titles of Scientific Publications of the Faculty that have
appeared in the past year.*

Dr. Charles M. Andrews,

"The Connecticut Intestacy Law," *Yale Review*, November, 1894.

Dr. George A. Barton,

1. "The Semitic Ishtar Cult," Part II. *Hebraica*, Vol. X.

2. Notes. *Hebraica*, Vol. X.

(a). "On the Semitic Ishtar Cult."

(b). "On the God Mut."

(c). "Was Ilu ever a Distinct Deity in Babylonia?"

3. "On the Interpretation of Shevet Sōpher in Judges V: 14." Read before the Society of Biblical Literature and Exegesis, December, 1894.

4. "A Plea for a Biblical Training." *Report of the Quinquennial Educational Conference of Friends*.

5. Review of Hilprecht's "Assyrica." *Classical Review*, May, 1895.

6. Several theological and religious articles in *The American Friend*.

Mr. Robert Gregg Bury,

1. "The Later Platonism." *Journal of Philology*, Vol. XXII.

2. "On Two Passages in Lucretius and Varro." *Classical Review*, March, 1895.

Dr. Hermann Collitz,

1. Articles on "Low German" and "Plattdeutsch." *Johnson's Cyclopædia*.

2. "Sammlung der Griechischen Dialekt-Inschriften," von H. Collitz und F. Bechtel, Band III., Heft iv., 2 Hälfte, Göttingen, 1895.

3. "The Etymology of ἄρα and of μάψ." *Proceedings of the American Philological Association*, 1894-95.

Dr. Alice Bertha Foster,

"A Few Figures on Occupation and Exercise." Read before the American Association for the Advancement of Physical Education, April, 1894.

Dr. Edward Washburn Hopkins,

1. "Religions of India." Published by Ginn & Co.
2. "Some Vedic Gods." *Oriental Journal*, December, 1894.
3. "Indra." *Oriental Journal*, March, 1895.
4. Review of Philipp's "Teaching of the Vedas." *The New World*, June, 1895.
5. Review of Holtzmann's "Mahābhārata," Part III. *Journal of Philology*, 1895.
6. Review of Deussen's "Geschichte der Philosophie." *Journal of Philology*, 1895.

Dr. Edward H. Keiser,

1. "On the Action of Magnesium upon the Vapors of the Alcohols, and a New Method of Preparing Allylene," by Dr. Edward H. Keiser and Mary B. Breed, A.B. *Chemical News*. Vol. LXXI.
2. Text-Book, "Laboratory Work in Chemistry, a Series of Experiments in General Inorganic Chemistry," 8vo., pp. viii., 119. Published by the American Book Company.
3. Review of Dr. Carl Arnold's "Repetitorium der Chemie." *Science*, May 10th, 1895.
4. Review of Sir Henry E. Roscoe's "John Dalton and the Rise of Modern Chemistry." *Science*, June 21st, 1895.
5. Review of Prof. Dr. Rudolf Arendt's "Bildungselemente und Erziehlicher Wert des Unterrichts in der Chemie." *Science*, August 9th, 1895.

Dr. Arthur Stanley Mackenzie,

- "On the Attractions of Crystalline and Isotropic Masses at Small Distances." *Physical Review*, March, 1895.

Dr. Dickinson Sergeant Miller,

- "Desire in Relation to Pleasure and Pain." Read before the American Psychological Association, December, 1894.

Dr. Thomas Hunt Morgan,

1. "Experimental Studies of the Blastula and Gastrula Stages of Echinus." *Archiv für Entwicklungsmechanik der Organismen*. II. Band, 2 Heft, 1895.
2. "The Fertilization of Non-nucleated Fragments of Echinoderm Eggs." II. Band, 2 Heft.

3. "Studies of the 'Partial' Larvæ of *Sphaerechinus*." II. Band, 1 Heft.

4. "The Formation of One Embryo from Two Blastulæ." II. Band, 1 Heft.

5. "Zur Analysis der ersten Entwicklungsstadien des *Ctenophoreneies*" (in collaboration with Hans Driesch). II. Band, 2 Heft.

6. "A Study of a Variation in Cleavage." II. Band, 1 Heft.

7. "A Study of Metamerism." (*The Quarterly Journal of Microscopical Science*, Vol. 37, 1895.)

Dr. Charlotte A. Scott,

"A Notice of Professor Cayley." *Bulletin of the American Mathematical Society*, Vol. I.

Dr. Herbert Weir Smyth,

"The Sounds and Inflections of the Greek Dialects." Vol. I. "Ionic." Oxford, at the Clarendon Press, 1894 ; pp. xxviii., 668.

President M. Carey Thomas,

"The Duties of the State and City to the Higher Education." Published as Number X. of the series of publications of the Civic Club of Philadelphia.

"The New Pedagogy." Published as Number XI. of the series of publications of the Civic Club of Philadelphia.

Memorial Address in honor of James E. Rhoads, LL.D. Published by Bryn Mawr College.

*Memorial Resolutions in honor of Dr. James E. Rhoads, President
of Bryn Mawr College from 1885 to 1895.*

Minute adopted by the Trustees of Bryn Mawr College :

In the removal by death of our beloved friend and colleague, James E. Rhoads, President of this Board, and until recently, of the College, the trustees are conscious of a loss beyond their power to express in words.

The qualification of mind and character which called him to the head of the institution under our care have left their impress upon it, as they did upon all the varied forms of active benevolence with which he was connected.

The loss we mourn is but a part of that loss, so broadly felt in many ways, which has elicited a testimony, wide-spread and rarely equalled, to the value of his influence, both in its extent and its quality, with many tributes to those personal characteristics which, beautified by grace, have deeply endeared him and his memory to all who were privileged to associate with him.

But it was to the educational work over which he presided that he gave, in the maturity of his power, the fullest effort of an ever-earnest life. Appreciating the possibilities for elevating influences in the opening lives thus brought around him, he gladly gave of his best and richest, and, laboring with unsparing effort to promote the highest welfare of the institution, he showed in beautiful humility the possible results of energies consecrated to the highest ideals of life.

So it is especially fitting for his co-trustees to record their full appreciation of his invaluable part in the execution of the important trust committed to them ; and (assured as to *his* wish), they desire that the central thought of this expression should be a recognition of Divine grace, to which he ever ascribed the only qualifying power for truly effective service.

Therefore, with hearts tendered under a sense of our great loss, and of the added responsibility it brings, we would thus reverently record our sincere gratitude to the Almighty Disposer of events

that Bryn Mawr College should have had for its first President one whom the students could be confidently invited to regard as a type, in the fullest sense, of a true Christian gentleman, and a ripe scholar in that highest range of learning, the school of Christ. One whose sympathies, quickened by a consciousness of his own deepest needs, were ever ready with their rare union of strength and tenderness, whose fearless trust in the right and confidence in the essential harmony of all truth were of special value in wisely encouraging the researches of reverent scholarship. An unaffected courtesy, blended with an unconscious nobility of demeanor. He was free from self-assertion, though manifesting a holy boldness when he believed the truth required it.

But it was the crowning beauty of his life, that he filled with rare and rich meaning the idea of the Divine immanence, the indwelling of the life of Christ in the soul, which, as it is realised, becomes the fulfillment of the gospel purpose. It was his cordial response to the operation of this sanctifying truth that caused even his presence to be felt as an inspiration toward the pure and holy; and that clothed the silent language of his life with the baptising power of an unceasing prayer, that richest blessing of communion with Christ, which makes Him, though unseen, a beloved friend and an ever-present Heavenly Guide.

Resolutions passed by the Faculty of Bryn Mawr College :

Whereas, Death has called from us our friend and colleague, Dr. James E. Rhoads, the first President of the College; be it

Resolved, That we here record our affectionate admiration for his personal character, our grateful recognition of his unfailing courtesy and sympathy, our appreciation of his untiring efforts on behalf of the College, and our profound sense of loss in his removal from us;

Resolved, That we desire to express to Mrs. Rhoads, her son, and her daughters, our most sincere and reverent sympathy in their bereavement;

Resolved, That these resolutions be entered in the Faculty records, and that a copy be sent to the family of Dr. Rhoads and to the Board of Trustees.

Resolutions passed by the Alumnæ Association of Bryn Mawr College:

Whereas, We, the Alumnæ of Bryn Mawr College, have heard with the deepest sorrow of the death of Dr. Rhoads, the first President of the College;

Resolved, That we do hereby express our appreciation of his unceasing efforts to promote the highest interests of the College, our reverence for his noble Christian character, and our gratitude for the help that we, as students and Alumnæ, have received from his personal friendship;

Resolved, That we convey to those most closely related to him our heartfelt sympathy in their great sorrow.

•

UNIVERSITY OF MICHIGAN



3 9015 06820 0156

